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ABSTRACT

Information on college applications, acceptances, financial aid, and attendance is presented based on base-year and first follow-up data for the National Longitudinal Study and the High School and Beyond Study of the Federal Center for Education Statistics. The focus is on changes that occurred between 1972 and 1980 in the two senior cohorts. Many of the analyses include several control variables: race, sex, socioeconomic status, and ability level. Information is included on: changes in the percentages applying to any postsecondary institution as well as the changes in those applying to one, two, or three or more institutions; changes in the types of institution selected; changes in characteristics of institutions selected (quality, in-state versus out-of-state, cost, and size); percentages of students who applied for aid at their first, second, and third choice colleges; the percentages of students in both cohorts who received an aid offer; the percentages who received grants, loans, or work-study aid among those who received an aid offer; changes in attendance rates; attendance rates by number of applications; and changes in attendance at colleges offering aid. Information on the research methodology and statistical analyses is appended. Concluding the document are tables (comprising two-thirds of the document) that detail the content and methodology of the project. (SW)

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Changes in Postsecondary Educational Choices: 1972 to 1980

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Changes in Postsecondary Educational Choices: 1972 to 1980

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FOREWORD

This report was produced by the Miami University of Oxford, Ohio under a contract with the Center for Education Statistics (CES). This study employed base-year and first follow-up data for the National Longitudinal Study and the High School and Beyond study to examine several aspects of involvement in postsecondary education institutions: application, acceptance, financial aid, and attendance. The focus is on changes that occurred between 1972 and 1980 in the two cohorts. Differences by types of institution, as well as differences on several student variables, were also examined.

Information about obtaining High School and Beyond computer tapes is available from the U. S. Department of Education, Office of Educational Research and Improvement, Information and Media Services, 555 New Jersey Avenue, NW., Washington, D.C. 20208-1327, telephone (202) 357-6528.

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CHAPTER 1

BACKGROUND

> Postsecondary schooling is a major prerequisite for many careers and has an important bearing on life-styles, aspirations, and social status in general. Thus, the determinants of postsecondary education contribute significantly to social and economic outcomes in American society (Manski and Wise, 1983:1)

Introduction

Educational aspirations, expectations, and attainment play a central role in the lives of adolescents and young adults. The decision to attend some form of postsecondary education represents a major juncture for most adolescents, and is frequently the first major decision they must make. Many researchers have investigated the determinants of final educational attainment, particularly in the context of status attainment models. Researchers have also examined college plans and college attendance, although many lack the longitudinal data sets required to link the two. In addition, many of the data sets employed are relatively small in terms of both sample size and the number of variables. As a result, it is difficult to make very many subgroup comparisons on a variety of variables. Also, few researchers examine differences across institutional types and few compare first choice schools with second and third choice schools.

This study employs two of the largest national data sets on adolescents in the country to examine the changes in postsecondary educational choices between 1972 and 1980. The study examines not only changes in college application rates but also examines changes in financial aid application rates and award rates, as well as changes in college attendance rates. Comparisons are made across institutional types as well as among first, second, and third choice institutions. Various background variables are examined, and subgroup comparisons are made by sex, race, region, and other variables.

Theoretical Relevance

The data presented and discussed in this report are relevant to a number of influential theories. Perhaps the most relevant theoretical approach is that of the status attainment models that have been developed over the last two decades. Most of these view educational plans and college attendance as important intervening variables in the status attainment process (Alexander and Eckland, 1974; Garrison, 1982). Blau and Duncan (1967) were the first to propose and test a clear causal model. They studied how students' socioeconomic status background influenced the amount of education received as well the type of occupation selected. Sewell, Haller, and Portes (1969) extended the Blau-Duncan model by including students' aspirations as well as the influence of significant

others. They found both variables to be statistically significant, thereby demonstrating the importance of the plans held by adolescents. Alexander, Eckland, and Griffin (1975) found that including educational aspirations with social class background predicted educational attainment more accurately than did social class background alone. More recent research has substantiated these findings (Hauser, Tsai, and Sewell, 1983; Jencks, Crouse, and Muser, 1983). In short, status attainment models have received considerable theoretical and empirical support, and have underscored the role of both educational aspirations and college attendance for occupational success.

Human capital theory is also frequently employed to explain educational decisions. Mincer (1970:18) observes that "...a better understanding of the relation between investment and earnings requires an understanding of the factors determining investment." Individuals, according to these theorists, make rational decisions about obtaining education in terms of the perceived return on such investments in education (Becker, 1975; Wallace and Ihnen, 1975). This approach is consistent with a demand-supply framework. The demand for schooling is the product of the expectations of returns from a particular level of educational attainment and the probability that an individual will in fact successfully attain this level.

The major economic decision seniors face, therefore, is whether or not to pursue further education. This decision must be analyzed within the contexts of available opportunities. Many of the factors examined in this study are potentially related to both making this decision and successfully implementing it. In addition to such individual factors as race and sex, various school-related experiences may also influence the probability of success and, therefore, increase an individual's stock of human capital.

A third stream of theoretically relevant literature pertains to college choice models. In contrast to those who focus on only a few variables and in contrast to the status attainment emphasis on final educational attainment, these researchers focus on the variety of factors which influence the actual decision to attend college.

This literature typically focuses on a description of the actual decision making process (Tierney, 1983) and on the factors influencing the decision (Zemsky and Oedel, 1983). The major conclusion regarding the decision making process is that it is sequential and resembles a funneling process. The most salient factors in this process include SES, parental encouragement, ability, and academic motivation (Kohn, Manski, and Mundel, 1976). Researchers also examine the characteristics of colleges that affect their desirability, particularly proximity, availability of desired programs, academic quality, and costs (Engels and Bonk, 1980; Erdmann, 1983; Fuller, Manski, and Wise, 1982). Lee, et al. (1983) examined the impact of various types of financial aid on attendance and found that the proportion of students receiving a federal grant increased by 40% between 1974 and 1981. Ellickson, et al. (1982) also assessed the impact of financial aid on access and choice.

The college choice literature (and the other literature to some extent) also incorporates analyses of the social and economic environment. For example, Zemsky and Oedel (1983) observe that population changes as well as such factors as governmental policies, social constraints, and economic trends affect college attendance rates. For example, women and minorities have increased their participation rates considerably in recent years. As another example, the passage of the Higher Education Amendments in 1976 shifted the disposition of funds to the student instead of to the

school. Tierney, Houang, and Hensen (1979) argue that increased federal aid increases the likelihood of enrollment in private institutions. In short, a variety of social and economic factors circumscribe the decision to attend college.

Policy Relevance

An examination of the differences in postsecondary educational choices in 1972 and 1980 also has policy relevance. At the federal level, the results provide descriptive data on the numbers and proportions of college freshmen in the two study years, as well as the numbers and proportions who applied for financial aid. Data are also provided on the differences among the institutional types. Together, such figures will contribute to our knowledge of the higher education process at the national level. In addition, the relevance of college costs for enrollment may have implications for financial aid planning.

The results need to be interpreted within the contextual changes that occurred between 1972 and 1980 and will also help understand such changes. For example, substantial increases in financial aid occurred. Between 1972 and 1980 the amount of aid generated by Federal investment increased four-fold--from $2 billion in 1972 to over $10 billion in 1980. A substantial increase occurred among females participating in the labor force. Finally, college costs remained relatively stable in real dollars. The study helps examine the relevance of such developments for such policy relevant variables as application to any postsecondary education institution, application for financial aid, and attendance at a postsecondary education institution.

At a broader level, a decline in the college going rate will be of concern since a democracy functions best with a highly educated public. Similarly, substantial declines in application and attendance rates among highly able students will be of concern; such a development may presage a decline in the pool of highly talented educated young adults for various technical and leadership roles. This study will examine the linkages between various factors and rates of application, admission, and attendance, and receipt of financial aid offers.

At the institutional level, the results will help understand application, admission, and attendance patterns at each of the institutional types. Such results may help college officials understand enrollment changes as well as changes in the composition of entering students in the two study years. Since data are reported for only 1972 and 1980, projections about other time periods cannot be made. However, the differences noted in the characteristics of the applicant pool may encourage colleges and universities to examine their recruitment strategies. A substantial difference in the attendance rate of poorly prepared and motivated students may encourage the development of appropriate remedial strategies. Substantial differences in financial aid requests and receipts may yield insights on financing higher education. Private college officials may be particularly interested in such factors as tuition costs and shifting application rates.

The results will also be relevant for high school personnel, who must cope with the changing entry requirements of colleges and universities. Higgins (1984) argues that high school counselors play a key role in expanding students' awareness of financial aid opportunities. Factors linked to admission and attendance at various types of institutions could be used in counseling high school seniors who are contemplating college attendance.

Factors related to financial aid offers may help counselors to more effectively target their efforts.

The results may also be of interest to legislators as they address escalating costs at public institutions. For example, if it is shown that availability of financial aid substantially increases application and attendance rates among minorities, legislators may more willingly increase subsidies. A substantial increase in application rates to vocational institutions may warrant additional funding for such institutions. A substantial increase in applications to out-of-state institutions may warrant increased attention to the quality of a state's institutions. A substantial increase in importance attached to college expenses and financial aid as factors in selecting a college may suggest greater state funding for financial aid.

Relevant factors in application, and attendance at postsecondary institutions

Application factors The value of a college education has been questioned (Berg, 1970; Bird, 1971; Bowen, 1977). The economic returns to a college education have declined as the percentage of Americans with college degrees has increased substantially. As a result, many graduates are working in fields unrelated to their field of study. In such a situation, many young adults decide to pursue postsecondary education in hopes of better preparing themselves to compete in a tight job market (Corman, 1983; Gardner and Stowe, 1984; Wallace and Ihnen, 1975).

Selecting and applying to a postsecondary education institution are the first steps in the postsecondary education attainment process. Status attainment researchers have developed extensive models to account for final educational attainment and these place major importance on the role of educational expectations (Blau and Duncan,1967; Sewell, Haller, and Portes, 1969). This stream of literature suggests an initial focus on college application rates.

Various other researchers have focused on these first steps as crucial elements in the funneling process of postsecondary education institution choice (Tierney, 1983; Zemsky and Oedel, 1983). The major conclusion of such authors is that application behavior is critical. The range of possible choices best determines final choice and application (Kohn, Manski, and Mundel, 1976; Manski and Wise, 1983). Manski and Wise (1983) is a particularly relevant source since the authors used one of the National Longitudinal Study (NLS-72) data sets employed in this study. Much of their research focuses on predictors of application and admission, with a special emphasis on the role of financial aid. For example, they found that application rates to colleges and universities increased with high school class rank, SAT scores, parents' education, and parents' income. However, they limited their analysis to four-year colleges and universities, whereas this study also encompasses two-year and vocational institutions.

Financial aid factors The period between the early 1970s and the early 1980s was a time of expanding federal financial aid, in constant dollars (Gillespie and Carlson, 1983; Stampen, 1985). Leslie (1984) notes that the public role in student financing has increased moderately over time. However, Lee (1985) maintains that the maximum and the average awards have not kept pace with inflation. He also argues that federal aid has not grown in proportion to demand and has been spread over a greater number of students.

A major goal since the beginning of federal involvement in financial aid has been to be particularly responsive to the needs of minorities and those of lower economic classes. Doing so was expected to improve their access to higher education. This need-based approach expanded between the early 1970s and the early 1980s (Higgins, 1983; Stampen, 1985). For example, in 1981-82 one-half of recipients had incomes at or below the poverty level. Need-based programs favor lower-ability and minority students (Leslie, 1984). One exception to this trend toward need-based aid was the passage of the Middle Income Student Assistance Act of 1978, which eliminated family income ceilings for loan eligibility. The ceilings were reimposed in 1982 to slow the growth of financial aid programs.

Higgins (1984) notes that various studies in the 1970s showed that lack of financial aid information was one of the major barriers to college attendance. As a result, the Educational Amendments of 1976 were designed by Congress to improve the availability of financial aid information. Higgins (1984) used the High School and Beyond data to assess the extent to which potential entrants are knowledgeable about financial aid programs. He concluded that a significant lack of knowledge existed, particularly among minorities. He also found that, overall, knowledge of financial aid programs did not significantly affect attendance. However, lower SES students were somewhat less likely to attend if they lacked knowledge. Jackson (1978) found that the offer of a financial aid award increased by 7.2 percentage points the likelihood that an applicant would enroll. Alternatively, $100 of aid increased the likelihood that an applicant would enroll by .76 percentage points. He also found that low SES students responded more favorably to aid offers than other students. He found that college attendance was largely a product of the background factors discussed next.

Background variables Several background variables have been shown to be consistently related to college attendance. Research on sex has generally shown greater participation rates among males, although in recent years the participation rate among males has declined slightly while the participation rate for women has increased (Baldridge, Kemerer, and Green, 1982; Marini, 1978; Zemsky and Oedel, 1983). Females typically receive less encouragement from parents and others to attend college. When asked to identify the most likely reason why they might not go to college, 50% of females and 5% of males give the reason that their parents do not think they should (Tillery, 1973).

Recent research on race has generally found few differences among racial/ethnic groups in application rates, few differences in admission rates, but substantial differences in attendance and completion rates (Brown, 1982; Lisack, 1981; Manski and Wise, 1983; Tuttle, 1981). Manski and Wise (1983) note that blacks with given characteristics are more likely to apply to four-year colleges than whites with the same characteristics; unfortunately they did not study Hispanics. It should be noted that while several studies examine black-white differences, other than Gardner and Stowe (1984) very few researchers include Hispanics; even fewer include other racial groups.

The results for SES consistently show a positive effect on college application, admission, and completion (Levine, 1976; Prediger, 1970; Rumberger, 1982). Davis and Van Dusen (1975) show SES to be related to institutional type selected as well. Aptitude is also consistently related to college participation rates. In fact, several researchers argue that aptitude is the most important variable (Chapman, 1981, Tillery and Kildegaard, 1973; Trent and Medsker, 1967). Aptitude also has effects

through other variables, such as academic performance, influence of significant others, and type of institution (Litten, 1982; Sewell, Haller, and Portes, 1969).

Significant Others Significant others play a critical role in the aspiration and attainment processes. Parents, friends, teachers, counselors, and others provide encouragement, reflective feedback, and assessment of capabilities (Chapman, 1981; Levine, 1976; Sewell, Haller, and Portes, 1969). Although the influence of friends and of school personnel is often examined, the role of parents is by far the most frequently examined factor. The literature shows clearly that parents have the dominant influence on the college plans of adolescents (Lisack, 1981; Rumberger, 1982; Tillery, 1973), even with controls for SES (Trent and Medsker, 1969). The college choices made by close friends is also influential (Chapman and Johnson, 1979; Nolfi, et al., 1979). Some researchers have found high school teachers and counselors to have substantially less influence, with some noting they have virtually no influence (Engels and Bonk, 1980; Russell, 1980).

Orientations, plans, and experiences Several researchers have also examined the effect upon college aspirations and attendance of self-concept and various orientations (Gordon,1969; Otto and Haller, 1979). A high self-concept appears to enhance both educational aspirations and college attendance (Boocock, 1980; Brookover and Erickson, 1975). A high self-concept engenders the confidence necessary to aspire to and obtain a college education. Similarly, a high degree of internal orientation facilitates the accomplishment of goals through the belief that individuals have control over their decisions and the execution of those decisions (Lefcourt, 1966; Trent and Medsker, 1967).

School-related experiences Various school-related experiences are also related to college plans and attendance. The most frequently examined factor is academic performance, which is found to be one of the more important predictors of college aspirations, attendance, and completion (College Entrance Examination Board, 1969; Hansen, Gold, and Labovitz, 1972; Manski and Wise, 1983). Similarly, academic commitment as reflected in such factors as amount of homework completed and the type of high school curriculum, also play an important role, although these factors are frequently related to SES and academic performance (Kohn, Manski, and Mundel, 1976). Other academic factors that may be relevant include coursework in various subject areas, the amount and quality of counseling, teacher interest in students, the quality of teaching, and difficulty with coursework, the school routine, and study habits. Participation in various special programs, such as Upward Bound and Talent Search, have also been found to be relevant (Thomas and Braddock, 1981). Finally, participation in extra curricular activities influences college going (McDill and Coleman, 1965). In fact, Zemsky and Oedel(1983) found that participation in varsity sports predicted type of college desired even when such students were not of high SES and high ability.

Related educational factors Several other educational factors also influence college plans and attendance. For example, self-assessed ability to do college work predicts college aspirations (Tillery, 1973). The time at which the decision to attend college was made also affects college outcomes (Gilmour, 1981; Tillery, 1973). The type of college selected varies according to the characteristics of students (Hammack, 1981; Tierney, 1983). Proximity affects choices (Chapman, 1981; Kohn, Manski, and Mundel, 1976).

College characteristics themselves affect choices. Davis and Van Dusen (1975) found costs to be one of the most important college characteristics, and Engels and Bonk (1980) and Manski and Wise (1983) identified course offerings and academic quality as crucial characteristics. Manski and Wise (1983) argue that much of the effect of personal characteristics is manifested in college quality choices.

The remaining sections of this report are as follows: Chapter 2 reviews the application and acceptance results, Chapter 3 reviews the financial aid results, and Chapter 4 reviews the attendance results. Chapter 5 contains a summary of the results and Appendix A reviews the methodology and variables used in the study.

CHAPTER 2

CHANGES IN APPLICATION RATES

Introduction

This chapter examines the changes in application rates between the 1972 and 1980 senior cohorts. The results for this research issue describe the changes over the decade in the college selection and application steps in the postsecondary education institution attainment process. Several issues will be addressed. The first examines the changes in the percentages applying to any postsecondary education institution as well as the changes in those applying to one, two, or three or more institutions. The second examines the changes in the types of institution selected. The third examines the changes in the first choice/second choice combinations. The fourth examines the changes in several characteristics of institutions selected: quality, in-state versus out-of-state, cost, and size. The fifth examines the importance of several factors in choosing a college. Most of the analyses will also be presented for several control variables: race, sex, socioeconomic status, and ability level. The focus is on the changes that have occurred between the early 1970s and the early 1980s.

Changes in Application Rates to Postsecondary Institutions

This section examines the changes in the percentages applying to any postsecondary education institution as well as the changes in those applying to one, two, and three or more institutions. The percentage applying to any postsecondary education institution increased by 13.3 points, from 46.5% to 59.8% (see Table 2.1.1). Over half of those students who applied to any institution applied to only one. However, that percentage declined by 5.7 points, from 58.5% to 52.8%. The percentage applying to two institutions remained relatively constant at slightly over one-fifth, while the percentage applying to three or more institutions increased by 7.6 points, from 18.1% to 25.7%. The results show that 1980 seniors were more interested in pursuing higher education before than 1972 seniors.

Sex differences are reported in Table 2.1.2. The percentage point increase for those applying to any institution was 16.2 for females (from 47.0% to 63.2%) and 10.1 for males (from 46.1% to 56.2%). The percentage point declines for those applying to one institution was similar, 5.7 for males (57.4% versus 51.8%) and 6.0 for females (59.6% versus 53.6%). The percentage point increase in males applying to three or more institutions was 8.6 (from 18.4% to 27.0%), while the increase for females was 6.6 (from 17.9% to 24.5%).

The increase for females applying to any institution is frequently attributed to the expanded opportunities for women over the decade. Several decades ago males were much more likely to apply to postsecondary education institutions. The data presented in Table 2.1.2 indicate that males and females applied to a postsecondary institution at the same rate in 1972; in 1980, females were more likely to apply. Given the greater role of women in the workforce, the increase among females may also reflect a recognition of the importance of advanced education for entering the work force. In addition, both sexes seem to have become more concerned with making more applications.

Table 2.1.3 reports the race differences in the percentages applying to postsecondary education institutions. The results for application to any institution suggest an increase among blacks (18.8 percentage points, from 42.4% to 61.2%), which may be greater than among Hispanics (13.2 percentage points, from 37.1% to 50.3%) or whites (12.0 percentage points, from 47.9% to 59.9%). The percentage point decline in application to one institution was 10.5 for Hispanics (64.9% to 54.4%), 8.8 for blacks (53.7% to 44.9%), and 4.9 for whites (58.9% to 54.0%). Similarly, the percentage point increase in application to three or more institutions was 12.5 percentage points for Hispanics (12.7% to 25.2%), 8.4 for blacks (23.0% to 31.4%), and 7.1 for whites (17.7% to 24.8%).

The results suggest that in both years Hispanics may have been the least likely to apply to any school. The results also suggest that, while blacks may have been somewhat less likely than whites to make any application in 1972, in 1980 they were equally likely to do so. Furthermore, the declines in percentages applying to one school approximated the increases in percentages applying to three or more schools for all three races. This shift away from one application to three or more applications was most noticeable among Hispanics. In 1980, Hispanics and whites were equally likely to apply to three or more schools while blacks may have been more likely to do so than either Hispanics or whites. The large increase among blacks in the percentage applying to any institution and the greater percentages of Hispanics and blacks applying to three or more institutions suggest that minorities are increasingly applying to institutions of higher education.

Differences by socioeconomic status (SES) are reported in Table 2.1.4. The results for those applying to any institution show approximately equal increases--14.6, 16.2, and 13.3 percentage points--between 1972 and 1980 for all three SES subgroups (from 31.5% to 46.1% for low, from 44.1% to 60.3% for middle, and from 67.9% to 81.2% for high). Declines of 5.0 and 6.7 percentage points occurred in the percentages of middle and high SES students applying to one institutions (from 62.4% to 57.4% for middle and from 51.0% to 44.3% for high). Increases of 10.3, 5.8, and 8.6 percentage points occurred in the percentages of low, middle, and high SES students applying to three or more institutions.

The disparities among the SES subgroups in 1972 and 1980 were similar, in spite of overall increases in the application rates. These results underscore the persistent relationship between SES and application to an institution of higher education. The substantial rate of increase among low SES students applying to three or more institutions might represent a greater interest among these students.

Ability level differences are reported in Table 2.1.5. The ability measure used here is derived from the aptitude measure on each of the cohort's data files. A high ability student is one who is the 85th percentile or higher. Both ability groups were substantially more likely to apply to any institution in 1980 than in 1972. The increases were 10.4 percentage points for high ability students (from 79.7% to 90.1%) and 15.1 percentage points for other students (from 42.3% to 57.4%). Non-high ability students were somewhat less likely to apply to one institution in 1980 than in 1972 (61.9% versus 56.5%, a decline of 5.4 percentage points) or two institutions (23.0% versus 20.8%, a decline of 2.2 percentage points), but were somewhat more likely to apply to three or more institutions in 1980 than in 1972 (15.1% versus 22.7%, an increase of 7.6 percentage points).

The results underscore the greater interest in higher education among high ability students. However, the percentage of non-high ability students applying to any institution may have increased more than did the percentage of high ability students; these results reflect a widespread heightened interest in higher education regardless of ability level. This conclusion is also supported by the noticeable increase in the percentage of non-high ability students who made application to three or more institutions.

Table 2.1.6 reports the results for the percentage applying to any institution by aptitude and SES. Since all but one of the increases are statistically significant, the results support the findings noted above for SES and ability level separately. Respondents in all but the high SES/low aptitude category were more likely to apply in 1980 than in 1972. The results also support the conclusions noted above that both aptitude and SES are directly related to the likelihood of applying.

In short, the results reflect greater application rates among a number of important categories of students. The results also suggest that the percentage point increases may have been greater for those with traditionally less participation in higher education: females, minorities, low SES, and non-high ability students.

Changes in Postsecondary Institutional Types to which the Senior Applied

This section examines the changes in the percentage applying to each type of postsecondary institution. The changes in the percentage applying to each type of first, second, and third choice institutions are reported in Table 2.2.1. Only three changes are statistically significant: a decline of 1.9 percentage points among those choosing an "other" as their first choice school, a decline of 3.9 percentage points among those choosing a two-year public as their third choice school, and an increase of 3.8 percentage points among those choosing an "other" as their third choice school. Among first choice schools, four-year public institutions (42.4%) were preferred to four-year private (24.5%), two-year public (23.2%), and "other" (9.9%) in 1980. Among second choice schools, four-year public institution (52.3%) were preferred to four-year private (29.7%), two-year public (11.2%), and "other" (6.8%). A similar result applies to third choice schools.

The results underscore the role of public institutions in this country, at least among high school seniors in 1972 and 1980. The two public institution types account for two-thirds of the preferences at first choice schools and just under two-thirds of the preferences at second choice schools. While nearly identical proportions (about one-fourth) selected four-year private and two-year public schools as their first choice institution, the respective values among second choice institutions are almost one-third and one-tenth. Hence, two-year public institutions drop in preference between first and second choices, and drop even further in third choice school. Four-year public institutions are the number one choice in all three selections and represent even greater proportions in second and third choice schools than in first choice schools.

The results for these changes performed separately for other control variable are reported in Table 2.2.2 for sex, Table 2.2.3 for race, Table 2.2.4 for SES, and Table 2.2.5 for ability level. However, only four of all the changes in these tables are statistically significant: the percentage of females selecting an "other" institution (15.3% versus 11.2%, a decline of 4.1 percentage points), the percentage of Hispanics selecting a two-year

public institution (41.2% versus 32.9%, a decline of 8.3 percentage points), or a four-year private institution (12.9% versus 20.7%, an increase of 7.8 percentage points), and the percentage of low SES students selecting a two-year public institution (25.6% versus 31.9%, an increase of 6.3 percentage points).

Hence, in general the distribution of application to the various types of postsecondary education institutions has not changed between 1972 and 1980.

Turning next to comparisons within the control variables, females were more likely than males in both years to select an "other" school (15.3% versus 8.1% for 1972 and 11.2% versus 8.5% for 1980). Since most of these schools are vocational, these data show greater vocational interest among females. In addition, males were more likely than females to apply to four-year private schools in 1972 (24.0% versus 20.3%), but no significant difference existed in 1980.

Several race differences exist. Hispanics were far more likely than blacks or whites to select two-year public institutions in both years (41.2% versus 18.1% and 20.9% for 1972 and 32.9% versus 20.8% and 22.9% for 1980). Hispanics showed less interest than blacks or whites in four-year public schools in both years (37.6% versus 44.7% and 45.1%, respectively, for 1972 and 36.1% versus 45.7% and 42.0% for 1980). They also showed less interest in four-year private schools in both years (12.9% versus 23.9% and 22.3% for 1972 and 20.7% versus 22.4% and 25.2% for 1980).

For the 1980 cohort, low SES students were more likely than middle or high SES students to select a two-year public institution (31.9% versus 26.3% and 14.1% respectively) or an "other" institution (15.1% versus 11.2% and 5.6%). High SES students were more likely than middle or low SES students to select a four-year public institution (46.7% versus 41.3% and 36.8%) or a four-year private institution (33.6% versus 21.2% and 16.2%). Similarly, for the High School and Beyond cohort, high ability students were considerably more likely than other students to select a four-year private institution (39.5% versus 19.2%) and somewhat more likely to select a four-year public institution (49.8% versus 40.7%). They are much less likely to select a two-year public institution (8.1% versus 27.6%) or an "other" institution (2.6% versus 12.5%). Above it was noted that SES is related to the decision to apply to a postsecondary education institution. These results also show a distinct pattern in choice of type of institution. In short, choice of institutional type has remained fairly stable between the cohorts, even when taking into consideration the sex, race, SES, or ability level of each cohort.

Changes in First Choice/Second Choice Combinations

This section examines the changes in the first choice/second choice combinations. The results are reported in Table 2.3.1 and show only three statistically significant changes out of the sixteen possible first choice/second choice combinations. Two of these significant changes are found among those whose first choice institution was a two-year public institution. The percentage of these students who also selected a two-year public institution for their second choice dropped by 21.4 percentage points, from 42.1% to 20.7%. However, the percentage of these students with a four-year public second choice institution increased by 27.8 percentage points, from 34.3% to 62.1%. Hence, the percentage with a two-year public/two-year public combination dropped by half while those with a two-year public/four-year public combination almost doubled.

The remaining statistically significant change was a decline of 5.0 percentage points among those with a four-year public/four-year private combination (22.8% to 17.8%). In summary, the results show that the choice patterns for those with two choices changed very little between 1972 and 1980, with the exception of those with two-year public/two-year public and two-year public/four-year public combinations. Overall, application to various types of institutions by first choice/second choice combinations seemed to exhibit remarkable stability between the two cohorts.

Changes in Institutional Characteristics

This section examines the changes in the cohorts' application by various institutional characteristics: quality, in-state versus out-of-state, cost, and enrollment. Table 2.4.1 reports the data on the entering freshmen mean SAT scores for first, second, and third choice institutions.[1] The changes between 1972 and 1980 in the quality of the first and second choice institutions were not statistically significant. The quality of the third choice institution increased minimally from 1,034.5 to 1,045.4, an increase of 10.9 points. Seniors selected slightly higher quality third choice institutions in 1980 than they did in 1972. The results also show that third choice institutions in both years have the highest quality score, followed by second and first choice institutions. These results may reflect the nature of those who select more than one institution. For example, it was noted above that high ability students are considerably more likely to apply to two and three or more institutions than other students. This may explain why second and third choice institutions have higher average SAT scores than first choice institutions.

Table 2.4.2 reports the results for changes in quality scores separately for each of the control variables. Only one of the ten changes is statistically significant: low SES students applied to lower quality institutions in 1980 than in 1972 (938.1 for 1972 and 923.0 for 1980, a decline of 15.1 points). Assuming that average SAT scores for each institution in 1980 are the same as in 1972, then no changes occurred between the two years in quality of first choice school.

Turning to comparisons within the categories of the control variables, males applied to slightly higher quality institutions than females in both years (997.0 versus 981.2 in 1980). Whites applied to the highest quality institutions, followed by Hispanics and blacks (999.7, 960.3, and 918.1 respectively, 1980 values). A direct relationship exists between SES and quality of institution applied to in both years (923.0 for low, 970.1 for middle, and 1,038.8 for high, 1980 values). Finally, high ability students applied to substantially higher quality institutions than did other students (1,069.9, versus 957.3, 1980 values). Hence, even among subpopulations, the quality of first choice institutions remained essentially the same.

Table 2.4.3 reports the changes in quality scores at each type of first choice institution. The results show no statistically significant changes. Within type of institution, therefore, students applied to similar quality institutions in both years. In both years, a similar rank order existed.

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[1] We again wish to remind the reader that these scores are mean SAT scores for the institutions to which the 1972 cohort applied. Data on mean SAT score or entering freshmen by institution for 1980 were not available, so the 1972 data were used.

Four-year private schools had by far the highest scores (1,067.9 in 1980), followed by four-year public schools (1,009.5). Two-year public and "other" schools followed with much lower but similar scores (873.4 and 864.2). Hence, the quality of the first choice institution did not change when analyzing institutions by type.

Table 2.4.4 reports the changes in the percentage of institutions that are in-state for first, second, and third choices. The results show no statistically significant changes. Over 80% of first choice institutions are in-state in both years, about three-fourths of second choice institutions are in-state, and about two-thirds of third choice institutions are in-state. Students do seem to prefer an in-state institution, undoubtedly due to the lower costs involved (at least for public institutions).

Changes in the percentage selecting an in-state institution as a first choice are reported in Table 2.4.5 for each of the control variables. None of the changes between 1972 and 1980 are statistically significant, which generalizes the lack of an overall change noted above. Comparing within categories of the control variables, equal percentages of males and females selected in-state institutions, while in 1980 Hispanics were noticeably more likely to select in-state institutions than blacks or whites (90.9% versus 80.4% and 81.0%). Low and middle SES students were noticeably more likely to select in-state institutions than high SES students (89.4% and 86.2% versus 70.7%, 1980 values), due perhaps to high SES students' greater interest in private institutions. Similarly, high ability students were also less likely to apply to in-state institutions (72.3% versus 85.0%, 1980 values), again perhaps due to their greater interest in private institutions.

Table 2.4.6 reports the changes in the percentage selecting an in-state institution by type of institution. The results show no statistically significant changes for any of the four types. Students whose first choice was a two-year public school were the most likely to apply in-state (96.0% in 1980), followed by those selecting a four-year public institution (88.1%), an "other" institution (80.0%), and a four-year private institution (55.6%). Two-year public institution applicants seem to have a more local orientation. Conversely, four-year private institution applicants seem to have a more cosmopolitan orientation to education. The fact that those interested in public institutions are the most likely to select an in-state school may reflect the lower costs of such schools and may also reflect these students' desire to remain relatively close to home.

Table 2.4.7 reports the costs at first, second, and third choice institutions; costs include tuition, fees, room, and board but exclude books, transportation, personal, and miscellaneous expenses. All three differences are statistically significant (1972 costs were adjusted to 1980 prices using the consumer price index). For first choice institutions, the mean adjusted real cost declined from $3,747 to $3,394, a decline of $353. This decline reflects a decline of 9.4% of adjusted 1972 costs expressed in real terms. For second choice institutions, the mean adjusted cost declined from $4,162 to $3,904, a decline of $258. This decline reflects a decline in real costs of 6.2%. For third choice institutions, the cost declined from $4,550 to $4,221, a decline of $329. This decline reflects a decline of 7.2% of adjusted 1972 costs. Since these are adjusted costs, the results show relatively modest declines in costs at all three choices. Relative to inflation, college costs have actually declined in "real" dollars, although the declines are not substantial.

The changes in cost at first choice institutions separately for each of the control variables are reported in Table 2.4.8. All but one of the

changes are statistically significant, underscoring the generalizability of the decline in costs noted above. Turning to comparisons within the control variables, only the sex differences are not statistically significant. In both years, whites selected the highest cost institutions ($3,458), followed by blacks ($3,205) and Hispanics ($2,975, 1980 values). The lower costs of institutions selected by Hispanics may reflect their greater application rates to two-year public institutions (see Table 2.2.3). In both years, high SES students selected the highest cost institutions ($3,908), followed by middle ($3,180) and low SES students ($2,927). The higher costs of institutions selected by high SES students may reflect their greater application rates to four-year private institutions (see Table 2.2.4). In both years, high ability students selected higher cost institutions than other students ($4,203 versus $3,098), perhaps due to their greater preference for four-year private institutions (see Table 2.2.5).

Table 2.4.9 reports the changes in costs for each type of first choice institution. A decline of $521 (from $3,197 to $2,676) occurred among four-year public institutions. (This reflects a decline of 16.3% of adjusted 1972 costs). A decline of $443 (from $6,315 to $5,872) occurred among four-year private institutions, and reflects a decline of 7.0% of adjusted 1972 costs. The decline at two-year public institutions was $198 (from $2,221 to $2,023), which reflects a decline of 8.9% of adjusted 1972 costs. The non-statistically significant decline of $85 at "other" institutions (from $3,921 to $3,836) reflects a decline of only 2.2% of adjusted 1972 costs. Declines (as a percentage of 1972 costs) at four-year private and two-year public institutions seemed to be about half of the decline at four-year public institutions. Costs at "other" institutions remained relatively stable.

Changes in enrollment size at first, second, and third choice institutions are reported in Table 2.4.10. None of the increases are statistically significant. Students in 1972 and 1980 applied to similar size first choice schools. Also, the differences among the choices are not very large, with second and third choice institutions being somewhat larger than first choice institutions (12,160 and 11,247 versus 10,970, 1980 values).

Changes in size of first choice institutions are reported separately for each control variable in Table 2.4.11. None of the changes between 1972 and 1980 are statistically significant; the lack of overall change noted above applies to all categories of students. However, males in both years applied to larger schools than did females (11,351 versus 9,937, 1980 values). Also, Hispanics applied in both years to the largest schools, followed by whites and blacks (12,791, 10,490, and 9,266). High SES students applied to larger schools, followed by middle and low SES students (12,512, 10,098, and 8,691). Finally, high ability students applied to larger schools than did other students (12,815 versus 9,924). The smaller schools selected by females may reflect their greater preference, compared to males, for "other" schools, which tend to be smaller (see Table 2.2.2). Similarly, the larger schools applied to by Hispanics may reflect their propensity to select public institutions (see Table 2.2.3). The larger schools applied to by high SES students may reflect their propensity for selecting four-year public institutions (see Table 2.2.4); high ability students are also more likely to select the larger four-year schools (see Table 2.2.5).

Table 2.4.12 reports the changes in enrollment size at each of the four types of first choice institutions selected by the two cohorts. The only non-statistically significant change occurred among those choosing four-year private institutions. The increases in size of the first choice two-year

and four-year public institutions were substantial (1,786 and 1,380 respectively), while enrollment at "other" institutions declined by 514. One reason for this decline in the size of "other" institutions may be that the growth rate for this type of institution exceeded that for other types. The growth rate in number of new institutions between 1972 and 1980 was 19% for two-year public institutions, 4% for four-year public institutions, 12% for four-year private institutions, but 41% for "other" institutions. With a dramatic increase in the number of such schools, it can be expected that the average enrollment would decline. Within both cohorts, four-year public institutions selected as first choices were the largest, followed by relatively similar sizes for two-year public and four-year private institutions, followed by "other" schools.

Changes in College Selection Factors

This section examines the changes in the importance of several factors in selecting a college. The results are reported in Table 2.5.1. Respondents indicated whether a particular factor was not important, somewhat important, or very important in selecting a college. The percentages reported are the percentage of respondents who judged the factor to be "somewhat" or "very" important.

The percentage noting each factor as important increased for all six factors between 1972 and 1980, which could suggest that students considered the factors relevant for the college selection decision more seriously in 1980 than in 1972. The academic reputation of the college and the availability of specific courses or curriculum were clearly the most important factors in both years, and each increased a minimal amount. Academic reputation increased by 3.7 percentage points (from 92.0% to 95.7%) and curriculum increased by 2.8 percentage points (from 94.8% to 97.6%). Next in importance was college expenses, which increased from 85.9% to 88.2% (an increase of 2.3 percentage points). Although selected by lower percentages than the preceding items, availability of financial aid increased the greatest amount, 17.3 percentage points (from 59.5% to 76.8%). Two factors were identified as important by less than half of both cohorts. One is athletic reputation, which experienced a substantial increase--14.4 percentage points (from 32.8% to 47.2%). The other is being able to live at home while at college, which increased moderately--5.9 percentage points (from 39.4% to 45.3%).

The results underscore the importance of academic issues in selecting a college in both years. The results also underscore the importance of financial issues, including both expenses and the availability of financial aid. The substantial increase in the importance of the availability of financial aid suggests that students have become much more sensitive to the availability of aid in the college choice decisions. Athletics has also assumed a greater role in college selection. Finally, being able to live at home while attending college also increased in importance, perhaps a reflection of sensitivity to keeping costs down.

Table 2.5.2 reports these changes separately for three of the institutional types (the items were not asked of those applying to "other" institutions). Three of the changes in college selection factors among those applying to two-year public institutions were statistically significant. Academic reputation increased by 9.1 percentage points (84.6% to 93.7%) and the availability of financial aid increased by 21.0 percentage points (56.8% to 77.8%). In addition, athletic reputation increased by 15.3 percentage

points (31.4% to 46.7%). Overall, academic issues were the most important to these students, followed by financial issues. About twice as many two-year public institution applicants as students selecting other institutions noted the importance of being able to live at home while attending school.

Among four-year public institution applicants, academic reputation increased by 3.3 percentage points (93.1% to 96.4%) and availability of curriculum increased by 2.3 percentage points (95.0% to 97.3%). Availability of financial aid increased by 18.1 percentage points (58.8% to 76.9%) and athletic reputation increased by 15.7 percentage points (33.5% to 49.2%). Except for the percentage noting the importance of being able to live at home, the values closely parallel those for students selecting two-year public institutions. In short, four-year public institution students are primarily concerned with academic issues, although financial aid and athletics have assumed a greater role.

Among those selecting four-year private institutions, availability of curriculum increased by 1.8 percentage points (96.8% to 98.6%), availability of financial aid increased by 10.2 percentage points (63.5% to 73.7%), athletic reputation increased by 14.6 percentage points (32.3% to 46.9%), and being able to live at home increased by 6.7 percentage points (24.7% to 31.4%). The percentage noting the importance of college expenses is the lowest of the three institutional types for both years, perhaps because these students tend to come from higher SES (i.e., higher income) backgrounds (see Table 2.5.2).

In summary, academic reputation and curriculum are extremely important in all three settings. Although still very important, college expenses are somewhat less important for those aspiring to four-year private institutions than for those aspiring to a public institution. Availability of financial aid became substantially more important to students applying to all three types of institutions, as did an institution's athletic reputation. Finally, being able to live at home was very important to two-year public institution students, but of much lesser importance to four-year public and four-year private institution students.

Summary

In summary, the results for this research issue reflect a substantial increase in the proportion of high school seniors interested in higher education. They also have become less likely to apply to just one institution and more likely to apply to three or more institutions. The greatest increases in application rates have occurred among women and minorities. Four-year public schools are selected by more students than any other type. First choice second choice combinations have remained stable. Negligible changes have occurred between the two cohorts in the quality of institutions selected, the proportion selecting an in-state school, and the size of institutions selected. Costs (in real terms) at first choice schools have declined modestly.

Seniors in 1980 attached more importance to all six of the factors examined for their importance in the college selection process. Academic factors are clearly the most important, followed by financial factors. Availability of financial aid became substantially more important to the 1980 cohort.

CHAPTER 3

CHANGES IN ACCEPTANCE RATES AND FINANCIAL AID

Introduction

This chapter first briefly examines the changes in acceptance rates at respondents' first, second, and third choice institutions and then examines changes in rates of application for financial aid and receipt of financial aid offers. Regarding changes in acceptance rates, the results show that almost everyone who applied was accepted. At first choice institutions, 92% of applicants were accepted in both years. About 88% were accepted at their second choice institutions, and about 85% were accepted at their third choice institutions (results not reported in tables). Apparently seniors carefully consider and screen the schools to which they apply in order to select institutions that are compatible and will be the most likely to admit them (cf. Manski and Wise, 1983). In addition, the results may reflect a certain degree of "open door" admission practices found in most institutions. In any case, the results show clearly that the colleges themselves are not an impediment in students' access to higher education in both cohorts. Since admission rates were so high, there were either no or only negligible differences within categories of the control variables. Hence, no further analyses were performed.

Several topics are examined regarding financial aid applications and offers. The first compares the percentages who applied for aid at their first, second, and third choice institutions. The second compares the two cohorts on the percentages who received an offer of aid among those who applied for aid. The third compares the percentages who received grants, loans, or work-study aid among those who received an offer of aid. The fourth compares the mean amounts of grants, loans, and work-study aid offered as percentages of the total aid received. The fifth compares the mean amounts of grants, loans, and work-study aid offered as percentages of the costs. The sixth compares the mean amounts of total aid offered expressed as percentages of costs.

A caveat: student reported financial aid information is problematic. While data on the application for aid may be quite accurate, recent findings suggest that students are less accurate in reporting the type, source, and amount of aid received (National Opinion Research Center, 1984). Readers are therefore cautioned in their use of the findings presented here. Future follow-ups of HS&B will overcome these reporting problems by collecting such information from postsecondary institutions' financial aid records and from federal program offices and records.

Changes in Percentages Applying for Aid

The changes in percentages of the 1972 and 1980 cohorts applying for financial aid at first, second, and third choice institutions are reported in Table 3.1.1. Only the changes for first and second choices are statistically significant. In both cases, the percentage increased, with a considerably greater increase for first choice institutions. At first choice institutions, the percentage rose from 32.7% to 51.8%, an increase of 19.1 percentage points. At second choice institutions, the percentage rose from

29.3% to 36.8%, an increase of 7.5 percentage points. These results show that students were substantially more likely to apply for financial aid in 1980 than in 1972. In part, this dramatic increase may reflect the wider variety of aid programs available (cf. Leslie, 1984; Stampen, 1985). It may also reflect the finding noted in Chapter 2 regarding the substantial increase in the percentage of students noting the importance of financial aid as a factor influencing their selection of a college (see Table 2.5.1).

The changes in percentages applying for aid at each of the various types of first, second, and third choice institutions are reported in Table 3.1.2. Increases occurred among all types of first choice institutions selected: 23.6 percentage points for two-year public institutions (from 19.8% to 43.4%), 20.4 percentage points for "other" institutions (from 27.0% to 47.4%), 18.8 percentage points for four-year public institutions (from 33.8% to 52.6%), and 12.3 percentage points for four-year private institutions (from 49.1% to 61.4%). In summary, rates of application for financial aid increased moderately among four-year private school applicants and substantially among those applying to the other three types of schools.

Regarding second choice institutions, only two changes are statistically significant. The percentages applying for aid at four-year public and "other" institutions both increased (25.6% to 33.5%, an increase of 7.9 percentage points, and 20.1% to 43.4%, an increase of 23.3 percentage points). None of the changes in third choice institutions are statistically significant.

The changes in percentages applying for aid at first choice institutions reported separately for each control variable are reported in Table 3.1.3. The fact that all of the increases are statistically significant suggests that all types of students were more likely to apply for aid in 1980 than in 1972. Turning to comparisons within the categories of the control variables, the percentage point increase for both sexes was about 19 points, with males and females about equally likely to apply for aid in both years (31.9% versus 33.5% for 1972 and 51.4% versus 52.2% for 1980). Although blacks were substantially more likely than whites to apply for aid in both years (55.7% versus 30.0% for 1972 and 72.3% versus 48.8% for 1980), the percentage point increases for both groups were similar (16.6 and 18.8 percentage points respectively). Hispanics were also more likely than whites to apply for aid in both years (51.8% versus 30.0% for 1972 and 59.8% versus 48.8% for 1980).

Low SES students were the most likely to apply for aid in both years, followed by moderate and high SES students (47.7% versus 33.4% and 24.9% for 1972 and 65.2% versus 55.0% and 41.6% for 1980). The increases were 17.5 percentage points for low SES students, 21.6 percentage points for moderate SES students, and 16.7 percentage points for high SES students. Finally, high ability students were more likely to apply for aid in both years (42.4% versus 29.8% for 1972 and 58.0% versus 51.6% for 1980), although the gap narrowed somewhat (from 12.6 percentage points to 6.4).

Table 3.1.4 reports the percentages applying for aid, by aptitude and SES. All but two of the changes are statistically significant, which substantiates the overall increase noted above. In addition, regardless of aptitude, low SES students were more likely than middle to high SES students to apply for aid. However, the gap between low and high aptitude students was 23.7 percentage points for high SES students, but only 7.1 for moderate SES students and 10.9 for low SES students. Hence, aptitude seems to make more of a difference among high SES than other students.

These differences underscore the widespread increase in the percentages of students applying for financial aid. The fact that minorities were substantially more likely than whites to apply for financial aid one or both years may reflect the greater need of such students for such aid. The fact that moderate SES students may have experienced the greatest increase in application rates may reflect expanded financial aid for such students. For example, the Middle Income Assistance Act of 1978 removed the income ceiling on aid eligibility. However, the fact that low SES students were the most likely to apply for aid suggests that financial aid programs are need related or that low SES students are more in need of aid. The fact that high ability students were more likely to apply for aid than other students may reflect their greater commitment to securing admission and financial support. However, the possible greater increase for non-high ability students demonstrates that these students are increasingly aware of and making application for financial aid. It also suggests that financial aid programs may have become more need-based than ability-based (cf. Lee, 1985).

Changes in Financial Aid Offers

Table 3.2.1 reports the changes in percentages who received an offer of aid among those who applied for aid at their first, second, and third choice institutions. In both years, about three-fourths of students who applied for aid received an offer of aid at their first choice institutions (71.5% versus 75.5%, an increase of 4.0 percentage points). The change in the percentage who received an offer of aid at their second choice institutions was not statistically significant (65.5% versus 72.7%). The percentage who received an offer of aid at their third choice school increased by 14.1 percentage points (59.2% versus 73.3%). In short, about three-fourths of those who applied for aid at their first choice schools received an offer of aid.

Table 3.2.2 reports the changes in percentages who received an offer of aid at each type of first, second, and third choice institution. For first choice schools, the increases for two-year public institutions (73.3% versus 77.9%) and four-year private institutions (73.9% versus 79.0%) were not statistically significant. The increase at four-year public institutions was 7.3 percentage points (65.4% versus 72.7%) and the percentage at "other" institutions declined by 13.7 percentage points (87.0% versus 73.3%). Hence, in 1980 about three-fourths of students applying for aid at their first choice institution received an offer of aid regardless of the type of institution to which they applied.

Only one change was statistically significant among second choice schools: the percentage who received an offer of aid at four-year public institutions increased by 11.9 percentage points (59.1% versus 71.0%). By 1980, about three-fourths of students applying to any type of second choice institution received an offer of aid. None of the third choice changes are statistically significant.

Table 3.2.3 reports the changes in percentages who received an offer of aid at their first choice institution, separately for each of the control variables. Only one change--an increase of 8.3 percentage points for blacks (74.4% versus 82.7%)--was statistically significant. This relative lack of change substantiates the small overall increase noted above. Turning next to a comparison of the categories within the control variables, sex differences were not statistically significant in 1980 (73.8% for males versus 76.8% for females), although in 1972 females were more likely to receive an

offer of aid (68.0% for males versus 74.6% for females). Hispanics were more likely than whites to receive an offer of aid in both years (82.3% versus 70.3% for 1972 and 80.8% versus 73.8% for 1980), although blacks were more likely than whites to receive an offer of aid only in 1980 (82.7% versus 73.8%). The differences between Hispanics and blacks were not statistically significant in either year.

In both years, low SES students were more likely than moderate and high SES students to be offered aid (82.3%, 72.5%, and 59.9% versus 85.8%, 76.8%, and 66.2% respectively). In 1972 only, high ability students were somewhat less likely to receive an offer of aid (66.7% versus 73.5%). Higher receipt levels for minorities show that the financial aid system increasingly meets the needs of such students, who frequently are in greater need of aid. The substantially higher receipt levels for low SES students also show that the financial aid system is specifically targeted for such students, who usually are lower income students (cf. Stampen, 1985).

Changes in Type of Aid Offered

Table 3.3.1 reports the changes in the percentages of 1972 and 1980 cohorts who received an offer of grants, loans and/or work-study aid among those who received an offer of aid at their first and second choice institutions. Receipt of an offer of each type of aid was determined by a non-zero amount reported for each type. That is, respondents were not asked if they applied for each type. Therefore, there is no way to determine, for example, the percentage of those who applied for a grant who received a grant. That is, if a respondent was not offered a grant, it could be because he or she did not apply or because he or she applied but was refused.

None of the changes reported in Table 3.3.1 are statistically significant for first choice institutions. In both years, two-thirds of those who received an offer of aid at their first choice institution received an offer of grant aid. In both years, 60% received an offer of loans. Almost one-third (30.4% and 32.8%) received an offer of work-study assistance at their first choice school. For second choice institutions, substantial increases occurred in the percentages who received an offer of loans (50.4% versus 60.3%) and work-study aid (30.5% versus 40.8%). These results show that grants and loans were about equally likely to be offered to students applying for aid at their first choice schools in both years, and that the percentage offered work-study assistance is about half that of those offered grants or loans.

The changes in percentages of students who received an offer of each type of aid at each type of first choice institution are reported in Table 3.3.2. None of the changes are statistically significant; the distribution of aid was fairly constant in both years at all four types of institutions. The results do show that those applying to a four-year private institution were by far the most likely to receive an offer of a grant (about four-fifths), which may reflect the relatively high costs at such institutions as well as the relatively greater availability of private types of aid. About two-thirds of students applying to two-year and four-year institutions received an offer of a grant, and less than half at "other" schools received an offer of a grant.

Students applying to "other" institutions were the most likely to receive an offer of a loan, with nearly three-fourths receiving such an offer in both years. About two-thirds of four-year private institution

applicants received an offer of a loan. Slightly less than two-thirds of four-year public institution applicants received a loan offer, and less than half of two-year public institution applicants received a loan offer.

Four-year private institution applicants were also the most likely in both years to receive an offer of work-study assistance (about two-fifths). About one-third of two-year public institution applicants received a work-study aid offer, as did less than one-third of four-year public institution applicants. "Other" institution applicants were the least likely to receive an offer of such aid, with about one-fifth receiving such an offer in both years.

Generally, therefore, students applying to higher cost institutions were more likely to receive an offer of all three types of financial aid. The fact that so many of "other" students who received an offer of aid received an offer of a loan may mean that such institutions (generally vocational) have fewer aid funds. Although two-year public and four-year public institution applicants were about equally likely to receive offers of grants and work-study assistance, four-year public institution students were more likely to receive an offer of a loan. Apparently two-year and four-year public institutions are relatively similar in their capabilities for providing grants and work-study assistance, at least in terms of these two cohorts. The fact that four-year public institution costs are greater than two-year public institution costs may explain the greater percentage of four-year public institution applicants who received a loan offer.

The changes in percentages who received an offer of each type of aid at their first choice institutions are reported separately for each control variable in Table 3.3.3. The fact that only six of the thirty changes reported are statistically significant underscores the relatively similar distributions of aid in the two years. The exceptions pertain to race and SES. Both Hispanics and blacks were substantially more likely to receive a grant offer in 1980 than in 1972 (71.7% versus 54.4% for Hispanics, an increase of 17.3 percentage points, and 67.3% versus 56.1% for blacks, an increase of 11.2 percentage points). In 1972, whites were more likely than Hispanics or blacks to be offered grants (67.1% versus 54.0% and 56.1%, respectively). By 1980, the differences were negligible. Also, blacks were substantially less likely to receive a loan offer in 1980 than in 1972 (58.0% versus 71.8%, a decline of 13.8 percentage points). Again, there is no evidence to indicate that the decline in the percentage offered a loan is due to a decline in loan applications or an increase in loan application rejections or both.

Low SES students were also more likely to receive a grant offer in 1980 than in 1972 (69.1% versus 56.6%, an increase of 12.5 percentage points), and less likely to receive a loan offer (53.8% versus 66.6%, a decline of 12.8 percentage points). High SES students, on the other hand, were substantially more likely to receive a loan offer in 1980 (66.4% versus 51.8%, an increase of 14.6 percentage points). In fact, in 1972 high SES students were the most likely to receive a grant offer (75.9% for high, 64.9% for moderate, and 56.6% for low), and the least likely to receive a loan offer (51.8% for high, 61.1% for moderate, and 66.6% for low). In 1980 negligible differences existed for grants and high SES students were the most likely to be offered loans (66.4% for high, 61.3% for moderate, and 53.8% for low). In summary, with the exception of race and SES subpopulations, the distributions of various categories of aid offered were similar for the two study years. Disparities between minorities and whites and between low and high SES students diminished such that by 1980 few differences existed for each type of aid.

Changes in Amounts of Aid Types Relative to Aid Offered

This section examines the changes in the amounts of grants, loans, and work-study aid offered expressed as percentages of the total aid offered. Table 3.4.1 reports these results for first and second choice institutions. None of the changes are statistically significant. In short, the distribution of total aid offered among the three types was relatively similar for the two cohorts.

For first choice institutions, grants, loans, and work-study aid comprised 44.6%, 42.6%, and 12.8%, respectively, of total aid offered (1980 values). The corresponding values for second choice institutions are 50.2%, 36.7%, and 13.1%. While grants and loans comprised similar proportions of total aid offered at first choice institutions (over two-fifths), at second choice schools grants comprised a greater proportion (one-half) and loans comprised a lower proportion (over one-third).

Table 3.4.2 reports the distribution across the three types of aid separately for each of the first choice institutional types. None of the changes are statistically significant; type of institution does not alter the conclusion noted above that the distribution of aid was relatively similar for the two cohorts. Using 1980 figures, grants, loans, and work-study aid comprised 48.6%, 39.0%, and 12.4%, respectively, for four-year private institution applicants, 42.7%, 44.0%, and 13.3%, respectively, for four-year public institution applicants, 49.1%, 36.7%, and 14.3%, respectively, for two-year public institution applicants, and 30.4%, 61.2%, and 8.4% respectively for "other" institution applicants. "Other" institution students were offered somewhat lower proportions of grants and work-study aid, but were offered a substantially higher proportion of their aid in the form of loans. The distribution of aid at the remaining three types of institutions is relatively similar.

Table 3.4.3 reports the comparisons for distribution of aid offers separately for each control variable. Only five of the thirty changes are statistically significant; this finding underscores the relatively similar distribution across the three types of aid in both years. The percentage of aid offered in the form of grants increased moderately for low SES students (37.6% to 48.4%, an increase of 10.8 percentage points), and the percentage of aid offered in the form of loans declined moderately for these students (46.0% to 36.0%, a decline of 10.0 percentage points). Exactly the opposite happened for high SES students, with the percentage covered by grants declining from 57.3% to 42.0% (a decline of 15.3 percentage points) and the percentage covered by loans increasing from 32.2% to 48.2% (an increase of 16.0 percentage points). In fact, the SES differences for grants and loans were statistically significant in 1972 but not in 1980. These changes reflect an alteration in the distribution of financial aid between the two years, with proportionately more grant money going to low SES students and proportionately more loan money going to high SES students. Apparently efforts to dilute some of the wide SES disparities in financial aid have been successful.

The remaining statistically significant change pertains to blacks receiving loans; the percentage of total aid covered by loans for blacks declined from 48.4% to 38.9%, a decline of 9.5 percentage points. In fact, blacks and Hispanics were both more likely than whites to receive an offer of a loan in 1972 (48.4% and 46.6% versus 39.3%), while in 1980 the differences were not statistically significant. Similarly, blacks and Hispanics were less likely than whites to receive an offer of a grant in

1972 (36.5% and 38.8% versus 47.5%), while in 1980 the differences were not statistically significant. Offers of grants and loans both were more equal among the races in 1980 than in 1972.

The distribution of aid across the three types was similar for both sexes in both years. In both years, high ability students were offered a substantially higher proportion of their aid in the form of grants than other students (57.1% versus 39.7% for 1972 and 51.3% versus 41.3% for 1980); other students received a greater proportion of their aid in the form of loans (45.3% versus 31.3% for 1972 and 45.2% versus 34.8% for 1980). Perhaps colleges use grant aid to attract high ability students. On balance, however, the results show a general similarity in the distribution of aid in the two years, with some alterations within the race and SES categories.

Changes in Amounts of Aid Types Relative to Total Costs

This section examines the changes in the amounts of each type of aid offered expressed as a percentage of costs; costs include tuition, fees, room and board but exclude books, transportation, and personal and miscellaneous expenses. Table 3.5.1 reports the mean amounts of grants, loans, and work-study aid offered expressed as percentages of the costs at first and second choice institutions. The results show non-statistically significant changes for all three types of aid at both first and second choice institutions. At first choice institutions, grants offered comprised 34.8% of costs while loans offered comprised 49.0% and work-study aid offered comprised 28.0% (1980 values). The respective percentages for second choice institutions were similar: 32.7%, 40.9%, and 23.0%. Hence, loans offered covered the greatest proportion of costs (about half at first choice schools), followed by grants (about one-third) and work-study aid (over one-fourth).

Table 3.5.2 reports the changes in the percentages of costs covered by each type of aid separately for each first choice institutional type. Only three of the changes are statistically significant. For students applying to two-year public institutions, the percentage of costs covered by grants declined by 17.0 percentage points, from 53.6% to 36.6% and the percentage of costs covered by work-study aid declined by 24.5 percentage points, from 63.5% to 39.0%. For "other" institution applicants, the percentage of costs covered by work-study aid offers declined by 15.6 percentage points, from 36.4% to 20.8%. In general, the proportion of costs covered by each type of aid was not substantially different for each cohort.

Table 3.5.3 reports the changes in the percentages of costs covered by each type of aid separately for each control variable. Turning first to grants, three of the ten changes are statistically significant. The percentage of costs covered by grants declined by 24.0 percentage points for Hispanics (from 61.5% to 37.5%) and by 13.4 percentage points for blacks (from 53.6% to 40.2%). The percentage also declined by 9.0 percentage points for non-high ability students (from 43.5% to 34.5%). The size of grants offered (relative to costs) declined for these categories of students. None of the changes for loans or work-study aid are statistically significant. With only minor exceptions, the results for various demographic groups indicate that the percentage of costs covered by each type of aid changed little between the two study years.

Turning next to comparisons within the control variables, grants offered as a proportion of costs were greater for Hispanics and blacks

than they were for whites in 1972 (61.5% and 53.6% versus 35.8%); the differences in 1980 were negligible. Also, grants offered to non-high ability students were a greater percentage of costs than they were for high ability students in 1972 (43.5% versus 32.6%); no difference existed in 1980. Loan offers as a proportion of costs were greater for Hispanics than they were for whites in 1972 (56.3% versus 41.6%); no difference existed in 1980. Loans offered as a proportion of costs were greater for non-high ability students than they were for high-ability students in both 1972 (48.7% versus 32.8%) and in 1980 (51.2% versus 43.0%). Finally, work-study aid offered as a proportion of costs was greater for non-high ability students than for high ability students in 1972 (38.7% versus 23.3%); no significant difference existed in 1980. In summary, even the few differences in 1972 generally did not exist in 1980.

Changes in Total Aid Offered Relative to Costs

This section examines the changes in the amount of total aid offered expressed as a percentage of costs. Table 3.6.1. reports the changes at first and second choice institutions, both overall and by institutional type. The base used in calculating these percentages includes those offered any type of aid. Hence, the total aid coverage percentages are less than the sum of the individual types of aid coverage discussed above. The results show no statistically significant changes between 1972 and 1980 for first choice institutions. Only one change was statistically significant for second choice institutions: the percentage of coverage provided by total aid offered declined by 25.9 percentage points for two-year public institution applicants (from 99.0% to 73.1%). Overall, the coverage provided by total aid offers did not change between 1972 and 1980; almost two-thirds of costs were covered.

Neither were there any significant changes between 1972 and 1980 within each institutional type, with the exception noted above. However, the coverage percentage did vary among the institutional types. For first choice institutions in 1980, two-year public institution applicants experienced the greatest coverage (75.5%), followed by four-year public institution applicants (71.7%), "other" institution applicants (54.8%), and four-year private institution applicants (48.9%, 1980 values). In summary, the two cohorts experienced very similar coverage of costs percentages. Among first choice schools, students applying to the two types of public institutions has about three-fourths of their costs covered by aid offers while those applying to "other" schools and to four-year private schools has about one-half of their costs covered.

Table 3.6.2 reports the changes in percentages of costs covered by total aid offered at first choice institutions, separately for each control variable. Only one change is statistically significant: the coverage increased by 13.0 percentage points for high SES students. Overall, the results show that the lack of change in overall coverage noted above applies to most categories of students.

Turning next to comparisons within the control variables, Hispanics' and blacks' coverage exceeded whites' in 1972 (80.9% and 78.2% versus 59.4%) and Hispanics' coverage percentage exceeded whites' in 1980 (71.4% versus 63.1%). Proportionately more aid has been offered to minorities. In 1972, the coverage for low and moderate SES students exceeded that for high SES students (73.7% and 65.3% versus 50.7%). No significant differences existed in 1980; the greater coverage experienced by low SES students in 1972 did

not occur in 1980, perhaps a product of the Middle Income Student Assistance Act. Similarly, the coverage percentage for non-high ability students exceeded that for high ability students in 1972 (69.8% versus 53.0%), but no significant difference occurred in 1980.

Summary

This research issue uncovered some important changes and differences regarding application for and receipt of offer of financial aid. These changes should be viewed in light of contextual changes that have occurred between 1972 and 1980. In the interim, there have occurred increases in both financial aid programs and funds (Stampen, 1985). In addition, aid programs became more need-based in the interim (Higgins, 1983). An exception to this trend toward need-based aid was the passage of the Middle Income Student Assistance Act of 1978, which eliminated family income ceilings for loan eligibility. The ceilings were reimposed in 1982 to lessen the growth of aid programs in response to the need to reduce the growing deficit.

The results reported in this chapter reflect some of these developments. A substantially greater proportion of the 1980 cohort than the 1972 cohort applied for aid at their first choice institutions, perhaps due to the expansion of aid programs. This increase was found among those applying to any of the four types of institutions. Minorities were much more likely to apply for aid than whites; low SES students were more likely to apply than other students; moderate SES students experienced the greatest increase between the two cohorts in the percentage applying (due perhaps to the Middle Income Student Assistance Act); and high ability students were more likely to apply for aid than other students.

In both years, about three-fourths of those applying for aid were offered aid. Generally, minorities, low SES students, and non-high ability students were more likely to be offered aid, and the disparities diminished somewhat between the two cohorts. In part, this reduction in disparities may reflect the trend toward more need-based aid programs. It may also be due to the timing of data collection associated with the peak of the Middle Income Student Assistance Act.

In both years, two-thirds of those offered aid were offered grants, slightly less than two-thirds were offered loans, and about one-third were offered work-study assistance. Students applying to the higher cost four-year private institutions were more likely to be offered all types of aid.

The distribution of the types of aid across total aid offered did not change between the two cohorts. Grants and loans comprised over two-fifths each. Neither were there any significant changes in the coverage of costs provided by each type of aid. Grants covered about one-third of costs, loans about half, and work-study aid over one-fourth. Furthermore, there was no significant change in the amount of total aid offered relative to costs; almost two-thirds of costs were covered. Hence, although proportionately more students applied for aid, few changes occurred in the types applied for and coverage provided.

CHAPTER 4

CHANGES IN ATTENDANCE

Introduction

This chapter examines changes in attendance[1] at first choice institutions. Several topics are addressed. The first compares the two cohorts on percentages attending their first choice institution. The second compares the two cohorts on percentages attending their first choice institution for those applying to only one institution versus more than one. The third compares the percentages who received an offer of financial aid among those attending their first, second, and third choice institutions. The fourth compares the percentages attending an institution at which they received an offer of financial aid. The fifth examines the type of institution attended among those who did not attend their first choice institution, and examines the difference in quality between first choice institution and institution actually attended.

Changes in Attendance Rates

Table 4.1.1 reports the percentages of 1972 and 1980 cohorts attending their first choice institution overall and for each institutional type. Overall, the percentage attending their first choice institution increased by 5.9 percentage points, from 66.6% to 72.5%. Most students do attend their first choice institution, and the trend has been for this percentage to increase.

Although the percentage of students attending each of the four types of institutions increased, only the increase for two-year public institution students is statistically significant. That percentage increased by 10.3 percentage points, from 73.3% to 83.6%, which is almost double the overall increase noted above. Also, in both years two-year public institution applicants were the most likely to attend their first choice school. In 1980, 83.6% did so, versus 73.1% for "other" institution students, 71.4% for four-year public institution students, and 63.8% for four-year private institution students. Perhaps these results reflect the geographical proximity of two-year public institutions or their admission criteria. This interpretation may also apply to the comparatively lower percentage of four-year private institution students who attend their first choice school; these schools are frequently far away and require greater investment of time and money. Cost may also be a factor; four-year private institutions have the highest costs and two-year public institutions have the lowest costs (see Table 2.4.9).

In summary, most students do attend their first choice school, and the percentage was slightly higher in 1980 than in 1972. Two-year public institution applicants are the most likely to attend their first choice school.

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[1] Access to postsecondary education was the topic of a prior report (see Gardner, J. and Stowe, P., *Transition from High School to Postsecondary Education*, Ohio State University, 1985).

The percentages attending their first choice institutions are reported separately for each control variable in Table 4.1.2. All but two of the ten changes are statistically significant; the increased likelihood of attending a first choice institution cuts across almost all types of students. The increases for males and females were very similar (5.3 and 6.5 percentage points, respectively, from 67.3% to 72.6% and from 65.9% to 72.4%); the differences between males and females in both years are negligible.

The percentage point increase was 8.1 for blacks (from 53.6% to 61.7%) and 6.2 for whites (from 68.3% to 74.5%). The increase for Hispanics is not statistically significant. In both years, whites were the most likely to attend their first choice school (68.3% for 1972 and 74.5% for 1980), followed by Hispanics (64.2% and 70.2%) and blacks (53.6% and 61.7%). The results for application showed that blacks and whites were about equally likely to apply, with Hispanics less likely to apply (see Table 2.1.3). But whites are only slightly more likely to attend than are Hispanics, and blacks are less likely to attend than either whites or Hispanics. That is, although Hispanics' application rate is about 11 percentage points below blacks', Hispanics' attendance rate is about 9 percentage points above blacks' (1980 values).

Attendance rates increased for all three SES levels. The increase was 10.1 percentage points for the low SES category (from 58.8% to 68.9%), 7.0 percentage points for the middle category (from 66.7% to 73.7%), and 6.0 percentage points for the high category (from 69.8% to 75.8%). The difference between the attendance rates for the low and high SES categories was 11.0 percentage points in 1972 and 6.9 in 1980. These results confirm previous research on the linkage between SES and implementation of educational plans, but also show that the SES gap has narrowed somewhat.

Finally, the percentage point increase for high ability students was negligible while the increase for other students was 9.7 percentage points (from 64.7% to 74.4%). In 1972 high ability students had higher attendance rates (71.2% versus 64.7%), but in 1980 the values were similar (72.6% for high ability and 74.4% for other students, not statistically significantly different).

Table 4.1.3 reports the percentages attending their first choice school, by aptitude and SES. The results indicate that only the increases for the middle aptitude categories in each of the SES categories are statistically significant. Attendance rates increased for middle aptitude students, regardless of SES. Also, the gap between low aptitude students in the low and high SES categories is 16.1 percentage points in 1980 (60.1% versus 76.2%), while there is no gap between high aptitude students in the low and high SES categories. That is, in situations of low aptitude, SES was related to attendance; in situations of high aptitude, SES was unrelated to attendance.

Furthermore, a gap of 13.0 percentage points (60.1% versus 73.1%) existed between low and high aptitude students in the low SES category in 1980, whereas a nonstatistically significant difference existed between low and high aptitude students in the high SES category. That is, aptitude is related to attendance among low SES students but not among high SES students. SES and aptitude each seem to have their own connection with attendance, particularly in the low categories of each variable.

In short, these results underscore the generalizability of the modest increase in the percentage attending their first choice institution. SES and ability level differences declined substantially, while the race differences remained relatively constant.

Attendance Rates by Number of Applications

Table 4.2.1 reports the changes in percentages of 1972 and 1980 cohorts attending their first choice institution for those applying to only one institution versus more than one. Only the increase for those applying to only one institution--7.5 percentage points--is statistically significant; it increased from 78.8% to 86.3%. The increase for those applying to two or more institutions is not statistically significant, with about one-half attending their first choice institution.

These data may simply reflect the options available to students; those making only one application can only attend that institution, whereas those making two or more applications can attend any one of those institutions (assuming acceptance). Students making one application are perhaps more certain in their choice of institution, whereas those making two or more applications may wish to increase their options but still tend to attend their first choice institution.

The comparisons for each of the four institutional types are reported in Table 4.2.2. Only the increases for those attending two-year and four-year public institutions are statistically significant among those making only one application. The increase for two-year public institution students was 8.0 percentage points (79.4% to 87.4%), and the increase for four-year public institution students was 4.7 percentage points (83.4% to 88.1%). For comparison purposes, the nonstatistically significant change for four-year private institution students was 79.1% to 84.7% and for "other" institution students was 75.6% to 79.9%. Overall, the percentages attending their first choice institution were quite similar for each of the four types in each of the two years, with "other" institution students having slightly lower percentages.

For those making two or more applications, only the increase for two-year public institutions was statistically significant. The percentage point increase was 19.2 (47.5% to 66.7%). In 1972, the percentages attending their first choice institution were similar for each of the types (two-year public was 47.5%, four-year public was 50.0%, four-year private was 48.0%, and "other" was 48.2%). In 1980, however, two-year public institution students were substantially more likely to attend their first choice school (two-year public was 66.7%, four-year public was 54.1%, four-year private was 50.5%, and "other" was 51.0%). Perhaps costs, proximity, and the ability to get an advanced degree in two years encouraged these students to apply to and attend such institutions.

Table 4.2.3 reports the changes in percentages attending their first choice school for those making only one application versus more than one, separately for each control variable. Turning first to those with only one application, nine of the ten increases are statistically significant. The overall increase in percentage attending their first choice institution noted above applies to almost all categories of students. Males and females were approximately equally likely to attend their first choice school, although the increase for females was slightly greater. The change for males was 6.3 percentage points (80.8% to 87.1%) and the change for females was 8.7 percentage points (76.9% to 85.6%). Whites were more likely than blacks and Hispanics to attend their first choice school in both years, The change for Hispanics was 8.2 percentage points (72.6% to 80.8%), 11.4 percentage points for blacks (67.7% to 79.1%), and 7.6 percentage points for whites (80.2% to 87.8%).

The increases for all three SES categories were relatively similar, although in both years high SES students were the most likely to attend their first choice school and low SES students were the least likely to do so. The increases were 9.9 percentage points for low SES students (68.4% to 78.3%), 7.8 percentage points for middle SES students (78.0% to 85.8%), and 8.3 percentage points for high SES students (86.1% to 94.4%). High ability students were more likely to attend their first choice school than other students in both years (88.7% versus 76.2% in 1972 and 92.7% versus 85.2% in 1980).

Only one of the ten changes for those making two or more applications is statistically significant: a 10.9 percentage point increase for non-high ability students (45.6% to 56.5%). In 1980, high ability and other students were equally likely to attend their first choice school. In short, the data confirm the overall results noted above (especially in Table 4.2.1): those making one application have become more likely to attend their first choice school, while those making two or more applications generally have not.

Changes in Offers of Financial Aid

The changes in the percentages who received an offer of financial aid among those attending their first, second, and third choice institutions are reported in Table 4.3.1. Only the changes for first and second choice institutions are statistically significant. The percentage point increase for those attending their first choice institution is 17.6 (an increase from 25.3% to 42.9%) and the percentage point increase for those attending their second choice institution is 13.5 (an increase from 28.9% to 42.4%). The values for third choice attendance are slightly below those for first and second choice attendance (27.2% to 36.6%; this change is not statistically significant). The results show clearly that the 1980 cohort was substantially more likely than the 1972 cohort to receive an offer of financial aid at their first and second choice schools. Only about one-fourth of 1972 seniors attending their first or second choice institution received an offer of aid, while over two-fifths of 1980 seniors received aid offers. The increase in the variety of aid programs and the increase in funds available in such programs may account for the increase.

Table 4.3.2 reports the changes in the percentages offered aid at their first choice school separately for each of the institutional types. Although the percentage point increases for all four types were substantial, the increase for "other" students was not statistically significant. The increases were 19.3 percentage points for two-year public institution students (15.3% to 34.6%), 18.9 percentage points for four-year public institution students (24.2% to 43.1%), and 15.1 percentage points for four-year private institution students (39.4% to 54.5%). The higher percentages for four-year private institution students may reflect the fact that financial aid needs analysis take into consideration the cost of attending school.

Table 4.3.3 reports the changes in the percentages offered aid among those attending their first choice school, separately for each control variable. Nine of the ten changes are statistically significant; the increase is found among almost all categories of students. Also, the percentage point increases were very similar (about 14-20 percentage points), which also underscores the generalizability of the overall increase discussed above.

Females were more likely than males to receive an offer of aid in 1972 (27.5% versus 23.1%), but the 1980 difference (44.3% versus 41.1%) is not statistically significant. Blacks and Hispanics were more likely than whites to receive an offer of aid in 1972 (52.0% and 45.7% versus 22.7%, respectively) as well as in 1980 (70.7% and 54.5% versus 39.1%). While the difference between blacks and Hispanics was not statistically significant in 1972, in 1980 the percentage for blacks was substantially greater than the percentage for Hispanics (70.7% versus 54.5%). The results for SES show an inverse relationship between SES and the receipt of aid. The values for the low, middle, and high groups were 45.5%, 26.9%, and 15.7% for 1972 and 64.3%, 46.2%, and 29.7% for 1980. This finding shows that aid programs are directed primarily at lower SES students, because student financial aid needs analysis take into consideration ability to pay.

The statistically significant greater likelihood for high ability students to receive an offer of aid in 1972 (29.2% versus 23.3%) did not occur in 1980 due to the greater increase in aid offered to non-high ability students; the 1980 values are 46.1% and 43.0%. This change may reflect a trend towards more need-based financial aid programs instead of ability-based programs. In summary, almost all categories of students were more likely to be offered aid in 1980 than in 1972. Minorities and low SES students seemed to be substantially more likely to be offered aid in both years, while sex and ability level differences seemed to diminish.

Changes in Attendance at Institutions Offering Aid

The preceding section examined the percentage of students who received an offer of aid among those attending various choice institutions. Included in the base, therefore, were students who did not apply for aid. In contrast, this section examines changes in the percentage of students who attended an institution at which they received an offer of aid. Included in the base, therefore, are only those offered aid. The results in the preceding section depict the percentages of all students attending a given choice institution who received an offer of aid, while the results in this section depict the percentage of those offered aid at a school who attended such a school.

Table 4.4.1 reports the changes in percentages of 1972 and 1980 cohorts who attended an institution at which they were offered aid; the results are reported overall and separately for each control variable. Whereas the preceding section revealed that a substantial percentage of students at a given school receive an offer of aid, the results here show clearly that the vast majority of students attended a school at which they received an offer of aid. In 1972, 84.1% of those offered aid attended an institution at which aid was offered, whereas 91.7% did so in 1980; the increase is 7.6 percentage points. The results may simply reflect the greater amount of aid available in 1980. The results may also reflect the increased importance attached to aid in the decision to attend a given institution.

Nine of the ten changes in the control variables analyses are statistically significant; the overall increase noted above applies to almost all of the subpopulations examined. The percentage point increases for males and females were very similar (7.9 and 7.4 percentage points), such that in 1980, 92.5% of males and 91.0% of females attended an institution at which an offer of aid was received. The sex difference is statistically insignificant in both years. In 1972, whites were more likely than Hispanics to

attend schools at which they were offered aid (85.3% versus 77.3%). In 1980, however, no race differences existed, due primarily to the substantial increase among Hispanics attending an institution at which they were offered aid. The increase for Hispanics was 13.1 percentage points (77.3% to 90.4%), 8.5 percentage points for blacks (81.5% to 90.0%), and 6.8 percentage points for whites (85.3% to 92.1%).

Regarding SES, the increases were 10.3 percentage points for low SES students (79.3% to 89.6%), 5.6 percentage points for middle SES students (86.0% to 91.6%), and 8.6 percentage points for high SES students (85.4% to 94.0%). However, intra-cohort SES differences are statistically insignificant in both years. While the increase for high ability students is not statistically significant, the increase among other students (from 81.7% to 91.5%) represents an increase of 9.8 percentage points. In 1980, virtually identical proportions of high ability and other students attended a school at which an offer of aid was received. Overall, these results show that the greatest increases in attendance at schools offering aid occurred among those with traditionally less involvement in higher education: minorities, low SES students, and non-high ability students.

School Attended by Those Not Attending First Choice School

This section examines the types of institution attended by those not attending their first choice institution and compares the quality between the institution identified as first choice and the institution actually attended. Table 4.5.1 reports the percentages who did not attend their first choice institution but who attended each type of their second/third choice institution. Only one of the 16 changes is statistically significant, which shows that the distribution of students not attending their first choice school but attending a given type of second/third choice institution did not change significantly between 1972 and 1980. The one significant change occurred among those with a four-year public first choice institution; the percentage of these students attending a four-year private institution declined by 8.1 percentage points (21.5% to 13.4%).

About half of those within each of the four types of first choice institutions attended the same type of second or third choice institution; the 1980 values are 45.5% for two-year public institutions, 51.8% for four-year public institutions, 50.0% for four-year private institutions, and 43.0% for "other" institutions. That is, students generally remained consistent in their choice of institutional type.

Students with a two-year public first choice school in 1980 who did not attend such a second/third choice school were more likely to attend a four-year private school (24.0%) than a four-year public (15.5%) or "other" school (15.0%). Students with a four-year public first choice school in 1980 who did not attend such a second/third choice school were more likely to attend a two-year public school (26.8%) than a four-year private (13.4%) or "other" school (8.0%). Students with a four-year private first choice school in 1980 who did not attend such a second/third choice school were more likely to attend a four-year public school (36.1%) than a two-year public (9.9%) or "other" school (4.0%). Students with an "other" first choice school in 1980 who did not attend such a second/third choice school were more likely to attend a two-year public school (28.2%) than a four-year private (14.5%) or a four-year public school (14.3%). In summary, those not attending their first choice school were the most likely to attend a second/third choice school of the same type as their first choice school.

Table 4.5.2 reports the differences between the first choice institutional mean SAT score and the mean SAT score of the institution attended for those not attending their first choice institution. The overall results are reported as are the results separately for each control variable. In summary, the gap between the quality score of first choice school and second/third choice school attended did not change significantly between 1972 and 1980. In both years, most students attending a second/third choice school were attending a school of moderately lower quality than their first choice school.

Summary

The proportion of applicants attending their first choice institutions increased from about two-thirds to almost three-fourths between the two cohorts. The increase for two-year public institution students was greater than the rest, and these students were the most likely in both years to attend their first choice school. Those making more than one application are much less likely to attend their first choice school.

The proportion offered aid among those attending their selected institutions increased noticeably between the two cohorts. In addition, most students attend a school at which they were offered aid, and the percentage for the 1980 cohort was higher than for the 1972 cohort.

CHAPTER 5

SUMMARY

Application

Application rate The results show a substantial increase between 1972 and 1980 in the percentage of seniors applying to a postsecondary education institution. Interest in advanced education in this country increased noticeably between the two study years. This greater interest in advanced education bodes well for increasing the potential educational level of the nation's workforce.

Females in 1980 were more likely than males to apply, which reflects the increased interest in higher education among females. This increase may reflect the expansion of women's opportunities over the intervening decade. This conclusion is particularly noteworthy given the fact that in 1972 there was no difference between the sexes.

The greatest increase in application rates occurred among blacks; in 1980 their application rate nearly equaled whites. However, Hispanics' application rate lagged substantially behind both whites' and blacks' in both years. Hence, white/black differences in this first step in the educational attainment process have disappeared while discrepancies between Hispanics and both whites and blacks remain.

In spite of relatively similar increases in application rates among the three SES groups, higher SES students were substantially more likely to apply than other students in both years. High ability students were more likely than others to apply in both years, although the gap narrowed slightly due to the greater increase in application rates among non-high ability students.

Type of institution Negligible changes occurred in the type of institution selected as a first choice school. Four-year public institutions were the predominant choice of high school seniors in both years and were selected by about two-fifths of the respondents. Four-year private and two-year public institutions were selected by about one-fourth each, and about one-tenth selected "other" schools. The two public institutional types account for two-thirds of the choices for these two cohorts; public institutions remain the predominant choice of high school seniors.

A few changes occurred in the types of institutions selected by the subpopulations. The percentage of females selecting an "other" (primarily vocational) institution declined. This finding, in connection with the greater application rate of females noted above, underscores the greater interest among females in non-vocational/technical training. Hispanics selected two-year public institutions in greater proportions than whites or blacks in both years. However, the decline in Hispanics' interest in two-year public institutions was matched by their increased interest in four-year private institutions. Finally, interest shown by low SES students in two-year public institutions increased slightly.

First choice/second choice combinations First choice/ second choice combinations of institutional types remained very similar between the two study years. Most students who made two or more choices selected the same type for both their first and second choices. One interesting exception was the shift in first choice/second choice combinations for students with a two-year public first choice institution. In 1972, these students were more

likely to also select a two-year public institution as their second choice, while in 1980 they were more likely to select a four-year public institution.

Institutional characteristics Overall, the quality of institutions selected did not change appreciably between the two cohorts. One exception is the noticeable increase in the quality of institutions selected by low SES students. Hence, the gap declined between low SES and other students in the quality of institution selected. No significant change occurred in preference for an in-state school.

Changes in the size of first choice school selected differed by type of school. The size of two-year and four-year institutions selected was substantially larger in 1980 than in 1972, while the size of "other" schools was much smaller in 1980. This decline may be due to the substantially greater growth rate of "other" schools. The size of four-year private institutions did not change significantly.

Total cost (in real values) declined by about 9% at first choice schools between the two cohorts. This decline suggests that costs in general did not keep up with inflation, rather than that students in general applied to lower cost schools. Costs declined for almost every control group category. However, whites, high SES, and high ability students applied to the highest cost schools, perhaps a reflection of their greater interest in four-year private schools. Costs at the four-year public institutions selected by the two cohorts declined the most--16.3%. Since students were more likely to select this type of institution than any other (over two-fifths selected it), proportionately more students experienced this greater decline instead of the lower declines among the other types.

Factors relevant for college choice Students attached more importance to all six of the factors examined in their choice of college, which could indicate that students considered at least these factors more seriously in their decision making in 1980 than in 1972. Academic reputation of the college and availability of desired curriculum were identified as important by nearly everyone. Expenses followed in importance, and the percentage noting it as important increased slightly. The importance attached to financial aid clearly increased the most among the six factors, which may reflect the heightened financial concerns of incoming college students. It may also reflect their greater awareness of the variety of aid programs available. Students seem very sensitive to cost issues.

Two factors were less important than the others: athletic reputation of the school and being able to live at home while attending college. However, the percentage noting athletic reputation as important increased noticeably.

Although some differences in the importance attached to the factors do exist across the types of institutions examined, students applying to all three types (items were not asked of those selecting "other" schools) rate the curriculum and academic reputation extremely high, followed by expenses and financial aid. Two-year public institution students are particularly likely to value being able to live at home while attending school. These results show that students remain vitally interested in the academic credentials of institutions. Hence, these students would probably welcome many of the changes recommended by various recent national reports on improving the quality of undergraduate education.

Acceptance

Virtually everyone in both cohorts who applied was accepted, at least at a second or third choice institution if not at a first choice institution. Hence, admission to a college does not seem to be a major impediment to attaining one's educational goals.

Financial Aid

Financial aid application rates The percentage of respondents who applied for financial aid increased from a third in 1972 to over half in 1980 at first choice schools. This change may indicate that financial aid has become more important to those considering postsecondary education; above it was noted that financial aid availability has increased in importance as a factor in selecting a college. The increase in the financial aid application rate may also indicate that applicants have become more aware of financial aid (Stampen, 1985), or that more financial aid was available in 1980 than in 1972 (Lee, 1985). For example, the Middle Income Assistance Act of 1978 removed income ceilings on aid eligibility.

The increase in the percentage applying for aid was similar for those selecting all but four-year private institutions (where the increase was smaller), although four-year private institution applicants were clearly the most likely to apply for aid in both years. Both blacks and Hispanics were substantially more likely than whites to apply for aid in both years. Low SES students were also more likely than others to apply for aid in both years, although the increase in application rate was the greatest for the moderate SES students. This greater increase may be due to the Middle Income Student Assistance Act, which was in effect for the 1980 cohort but not for the 1972 cohort.

Proportion offered aid Although proportionately more students applied for financial aid in 1980 than in 1972, the increase in the proportion who received an offer of aid among those who applied for aid was relatively small; about three-fourths received offers in both years. Some may argue that this offer rate reflects the success of financial aid programs. Others may argue that financial aid programs have not been sufficiently targeted in meeting the needs of those who could benefit the most. They argue that the proportion of those receiving aid could be reduced, with proportionately more aid going to those most in need (Samuelson, 1985; see also Hoenack, 1971).

Overall, the minimal increase in offer rates pertained to the subpopulations examined. One exception involves blacks, whose offer rate increased moderately. Both Hispanics and blacks, however, were somewhat more likely than whites to be offered aid. Also, low SES students were more likely than others to be offered aid. The need-based nature of many financial aid programs may be reflected in these results.

Type of aid offered About two-thirds of those offered aid were offered grants in both years, and slightly less than two-thirds of those offered aid were offered loans. About one-third were offered work-study assistance. That is, students were offered multiple sources of aid, particularly in the form of a grant and loan combination.

Most of the subpopulations resembled these overall distributions. The exceptions involved race and SES. Both Hispanics and blacks were substantially more likely to receive a grant offer in 1980 than in 1972, such that the race differences existing in 1972 were virtually nonexistent in 1980.

Also, blacks were substantially less likely to be offered a loan in 1980 than they were in 1972. The percentage of low SES students offered grants was much higher in 1980 than in 1972 and the percentage of low SES students offered loans was much lower in 1980 than in 1972. In 1972, high SES students were much more likely than low and moderate SES students to be offered grants; in 1980 the differences were negligible. In 1972, high SES students were less likely than low and moderate SES students to be offered loans; in 1980 they were the most likely to be offered loans. In short, race and SES disparities were less evident in 1980 than in 1972, again perhaps a reflection of the increase in need-based financial aid programs.

Distribution of type of aid offered The distribution of total aid offered across the three types of aid shows that grants and loans each accounted for over two-fifths of total aid offered in both years at first choice institutions, with work-study aid accounting for over one-tenth. Some minor variations from this overall distribution occurred among those selecting two-year public, four-year public, and four-year private institutions. At "other" institutions, however, grants comprised less than one-third of total aid offered, loans almost two-thirds, and work-study aid less than one tenth. That is, grants comprised less and loans comprised more of the total aid offered than at other types of schools.

Blacks experienced a noticeable decline in the percentage of aid offered covered by loans, low SES students experienced a moderate increase in the percentage of total aid offered covered by grants and a moderate decline in the percentage covered by loans, and high SES students experienced a substantial decline in the percentage of aid covered by grants and a substantial increase in the percentage of aid covered by loans.

In 1972, the percentage of aid offered covered by grants was higher for whites than for Hispanics and blacks; negligible differences existed in 1980. In 1972, the percentage of aid offered covered by loans was lower for whites; negligible differences existed in 1980. In 1972, coverage provided by grants was much higher for high SES students; negligible differences existed in 1980. In 1972, coverage provided by loans was lower for high SES students; negligible differences existed in 1980.

These changes reflect an alteration in the distribution of financial aid between the two years, with proportionately more grant money going to low SES students and proportionately more loan money going to high SES students. Efforts to dilute some of the SES and race differences seem to have been at least partially successful.

Coverage of costs provided by aid types The results for the analysis of coverage of total costs provided by grants, loans, and work-study aid showed relative similarity in coverage provided by each type of aid in the two years at first choice schools. For those offered grants, grants covered about one-third of costs; for those offered loans, loans covered about half of costs; for those offered work-study assistance, work-study assistance covered slightly more than one-fourth of costs.

Although the changes in the distribution of aid types were similar for most types of schools, there were a few exceptions. Two-year public institution applicants experienced noticeable declines in the proportion of costs covered by grants and work-study aid, and "other" institution applicants experienced a noticeable decline in the proportion of costs covered by work-study aid. In addition, there were few changes between the two cohorts for most of the subpopulations. The proportion of costs covered by grants declined for Hispanics and blacks, such that in 1980 race differences were

negligible. Apparently the size of grants offered to minorities in 1980 was lower than in 1972. Perhaps these results are a product of relatively small subgroup sizes.

Coverage of costs provided by total aid Total aid offered covered almost two-thirds of total costs in both years at first choice schools. Since the percentage applying for aid increased from one-third to over one-half and since about three-fourths of those applying received offers, a substantially greater proportion of students received the two-thirds coverage proportion in 1980 than in 1972. These results reflect the growth in financial aid programs.

No significant changes occurred within each institutional type. However, about three-fourths of costs were covered among applicants to two-year and four-year public institutions and about one-half of costs were covered among applicants to four-year private and "other" institutions. The lack of change in coverage of costs applied to almost all of the subpopulations. However, the substantially greater coverage percentages for minorities in 1972 did not occur in 1980. Also, the substantially greater coverage percentages for low and moderate SES students in 1972 did not occur in 1980, due perhaps to the Middle Income Student Assistance Act.

With the exception of the coverage of costs data, the results do show a reduction in the SES and race disparities in applying for and receiving offers of various types of aid. However, it would be erroneous to project these findings beyond the 1980 data collection year since the Middle Income Student Assistance Act was in effect in 1980 but has since been dismantled. In addition, other political, economic, and social trends have occurred since 1980.

Attendance

Attendance rates Two-thirds of the 1972 cohort and almost three-fourths of the 1980 cohort attended their first choice institution. These high attendance rates may reflect either the seriousness with which students make their educational choices or the ease of getting into almost any institution. The slight increase in the percentage attending their first choice institution may reflect greater interest among the 1980 cohort in pursuing postsecondary education.

Results reviewed above indicated a substantial increase between 1972 and 1980 in the percentage applying to any institution. Also, nearly everyone who applied was admitted. Together with the finding that the percentage attending their first choice school has increased, the results reveal a substantial increase in the percentages of the original samples that attended their first choice school. This percentage increased from 28.5% in 1972 to 40.3% in 1980, an increase of 11.8 percentage points. This increase of 11.8 points between 1972 and 1980 represents a 41.4% increase over the 1972 value of 28.5% in the percentage of the original samples that attended their first choice schools.

The increase in the attendance rate among two-year public institution students exceeded that for other institutions. Also, in both years, two-year public school applicants were the most likely to attend their first choice school. These results may suggest, among other things, that the geographical proximity and relatively low costs of these schools make the attendance decision easier to implement.

The increase in attendance rate applied to virtually all of the subpopulations examined. The SES gap in attendance rates narrowed somewhat due to the noticeable increase in attendance among low SES students.

Also, aptitude was linked with attendance particularly among low SES students, and SES was linked with attendance particularly among low aptitude students.

Financial aid and attendance The percentage offered aid among those attending their first choice school increased from one-fourth to over two-fifths. Data reviewed above showed a substantial increase in the percentage applying for aid. Hence, the increase in the percentage offered aid among those attending their first choice school indicates that a substantially greater proportion of 1980 students attended schools where aid was offered than did 1972 students.

Furthermore, the vast majority of students attended institutions at which they were offered aid, and the percentage doing so in 1980 was even higher than the percentage for 1972. These results suggest that an offer of aid may influence the decision to attend a given institution. However, the increases reported may also reflect an expansion between 1972 and 1980 in the types and amounts of aid available and in the awareness of such aid on the part of students.

The increase in the percentage offered aid among those attending their first choice school applied to virtually all subpopulations. In addition, blacks and Hispanics attending their first choice school were more likely than whites to be offered aid in both years. Low SES students were more likely than others to be offered aid in both years. This finding again suggests that aid programs are directed primarily at lower SES students.

Attendance at second/third choice schools The examination of attendance patterns of those not attending their first choice institution revealed that students generally attended a second or third choice institution of the same type as their first choice institution in both years. Attendance at a second or third choice institution generally means attendance at an institution of slightly lower quality than one's first choice institution.

APPENDIX A

APPENDIX A

MULTIPLE REGRESSION ANALYSES

Introduction

This appendix reports on exploratory multiple regression analyses used to assess the net effect of each of the control variables on application and attendance. The first topic examines the changes in the net effect of each of the control variables on the decision to apply to any institution. The second examines the changes in the net effect of each of the control variables on attendance at first choice institutions.

Within each subtopic, two separate analyses were performed. The first included only the basic control variables discussed in previous chapters: sex, race, SES, and aptitude. The second analysis included several other variables in addition to these basic control variables: parental influence on post-high school plans, counselors' influence on these plans, teachers' influence on these plans, friends' influence on these plans, involvement in student government, involvement in athletics, early college decision, high school grades, rural/suburban location, academic curriculum placement, locus of control, self-concept, and percentage of the schools' graduates who entered college. These variables have been suggested by various researchers as potentially relevant for college decision-making.

The limitation placed on this study required that the regression analysis be exploratory. More thorough, rigorous analyses may be found elsewhere (e.g. Manksi and Wise, 1983). The regression technique use in this analysis was ordinary least squarer (OLS). The dependent variable was a zero-one dichotomous variable. As a result the disturbance terms are heteroskedastic. These problems may be overcome with the use of logistic regression analysis. However, in our limited experience the logistic regression analysis will yield results similar to that of OLS, except when the probability of undertaking an action is either very larger or very small. For this reason the exploratory analysis discussed below was undertaken using the OLS technique and is necessarily somewhat limited in its value.

Application

Table A.1.1 reports the results of the regression analyses for application to any postsecondary education institution in 1972 and 1980. All of the values are statistically significant, except for sex, in 1972. The standardized partial regression coefficients (beta values) are used to show the unique effect of each variable. The results show that aptitude has the beta values for each cohorts of .364 and .376 respectively[1]. The beta values for SES are .162 and .175 for 1972 and 1980, and the beta values for "black" are .130 and .167. Although statistically significant, the beta values for "Hispanic" are low (.056 and .065). Finally, the beta for sex in 1980 is .087, showing that females were somewhat less likely to apply than males (the beta for 1972 was not statistically significant) when other variables are controlled. The variance explained is .175 for the 1972 cohort and .200 for the 1980 cohort.

[1]No test of statistically significant differences between the betas was conducted.

The results suggest for each cohort that among the independent variable the decision to apply to any institution may be largely a function of aptitude; the effect is positive. Of somewhat lesser importance are SES, with a positive effect, and being black. Sex and being Hispanic seem to be relatively unimportant. Overall, the results for the two years seem similar; the factors affecting the decision to apply to any institution do not seem to have altered substantially between 1972 and 1980. The linkages between the decision to apply and aptitude as well as to SES substantiate previous research documenting the pervasive effects of both of these variables. However, aptitude may be more important than SES, although both have unique positive effects. The results suggest that blacks may be more likely to apply to a postsecondary institution than are Hispanics or whites. That is, net of the effects of the other variables.

Table A.1.2 reports the regression analyses for the basic control variables plus the additional control variables noted above. Several of the variables were not included in the final regression analyses reported in Table A.1.2 since they failed to meet the criterion for statistical significance (.05) for both cohorts: self-concept, rural/suburban location, and friends' influence on future plans. The beta values for both cohorts show that aptitude, SES, and being in the academic curriculum while in high school are the most important factors. The 1972 and 1980 beta values for aptitude are .195 and .117 respectively, the values for SES are .100 for both years, and the values for academic curriculum are .141 and .138. The remaining beta values for the 1972 cohort are all below .100, and are therefore considered to be substantively insignificant. However, three additional beta values equal or exceed .100 in the 1980 cohort. The value for early college decision is .223, the value for grades is .160, and the value for counselors' influence on future plans is .100.

These results suggest that the effects of SES, aptitude, and academic curriculum are similar for the two cohorts. For the 1980 cohort, the decision to apply is additionally influenced by counselors, by deciding early to attend college, and by high school grades. Counselors may have played a greater role in students' postsecondary education decisions in 1980 than they did in 1972. High school grades may have become more relevant as a potential indicator of college ability, and deciding on college early may have become more important. The variance explained values are .236 for the 1972 cohort .353 for the 1980 cohort.

Attendance

The second topic addressed was the net effect of each of the control variables on attendance at first choice institutions. However, the variance explained for both cohorts is only about 1% and, therefore, the results are not reported in tables or analyzed. These low variance explained values suggest that the decision to actually attend a selected postsecondary education institution is more affected by variables not examined than by those discussed above.

Summary

In summary, the results suggest that aptitude and SES may be important variables in the decision to apply to a postsecondary education institution. The similarity in results for the two cohorts suggest that these variables may have some sustaining importance. However, the additional variables analyses suggests that academic curriculum, counselors' influence, early college decision, and grades may also be important influences on the application decision. None of the variables analyzed were important for attendance.

APPENDIX B

APPENDIX B

METHODS

Sampling procedures

National Longitudinal Study The sample design for NLS was a stratified, two-stage probability sample of students from all schools, public and private, in the 50 states and the District of Columbia, which contained twelfth graders during the 1971-1972 school year. The study excluded students from schools for the physically or mentally handicapped, those for legally confined students, and in special situations (such as area vocational schools) where students were also enrolled in other high schools in the sampling frame. Base-year data were collected in 1972, and follow-ups occurred in 1973, 1974, 1976, and 1979.

The first-stage school sampling frame was constructed from computerized school files maintained by the Office of Education and the National Catholic Education Association. It was divided into 600 final strata based on: 1) type of control (public or private), 2) geographic region, 3) grade 12 enrollment, 4) proximity to institution of higher learning, 5) percent minority group enrollment, 6) income level of the community, and 7) degree of urbanization. Schools were selected with probabilities proportional to the estimated number of seniors in the smallest strata (fewer than 300 seniors); schools were selected with equal probabilities in the remaining strata. The potential for including disadvantaged students was increased by sampling schools in low-income areas and schools with a high proportion of minority group enrollment at twice the rate used for the remaining schools. Four schools were selected within each final stratum, and two of the four were randomly designated as the primary selections; the other two schools were retained as substitute or backup schools.

The second stage of the sampling procedure consisted of first drawing a simple random sample of 18 seniors per school (or all if fewer than 18 were available) and then selecting five additional students (if available) as replacements. Seniors were sampled with equal probabilities without replacement. Early (i.e., mid-year) graduates and those attending adult education classes were excluded.

Only 948 of the 1,200 primary sample schools participated in the base-year survey. Resurvey activities prior to the first follow-up were successful in 205 of the 231 primary sample schools which either refused to participate or could not participate because the request was received too late in the school year. Hence, seniors from 1,153 of the 1,200 primary sample schools were included in the first and subsequent follow-ups. The final sample for follow-up surveys was increased to 1,318 schools through the use of backup schools and 16 sample augmentation schools.

Unadjusted student weights, the inverses of sample inclusion probabilities, were calculated for all students sampled. These weights are a function of the school selection probabilities and the student selection probabilities within school. Several sets of adjusted weights were computed because of the various sample redefinitions and augmentations and nonresponse to the various student instruments. Adjustments were made only for instrument nonresponse and not for item nonresponse.

A weighting class approach was used, which distributes the weights of nonrespondents to respondents who are most like them (i.e., in the same weighting class). The adjustment procedure involved partitioning the entire sample into weighting classes on the basis of high school program, race, grades, parents' education, and sex. Differential response rates for students in different weighting classes are reflected in the adjustment, and the weight total within each weighting class (and thus for the sample as a whole) is maintained. The weight used in the analyses was W3, which includes 21,350 respondents to the base-year and first follow-up questionnaires. Further details on the weighting procedures and limitations can be found in Appendix G of the Users Manual.

High School and Beyond HS&B is a national longitudinal study of the cohorts of 1980 high school seniors and sophomores in the United States; only seniors were used in this study. Students were selected through a two-stage probability sample with schools as the first stage unit and students as the second stage unit. With the exception of special strata, schools were selected with probability proportional to estimated enrollment; 36 seniors were randomly selected per school. All eligible seniors were drawn in the sample in those schools with fewer than 36 seniors. Base-year data were collected in 1980, and follow-ups occurred in 1982 and 1984.

The sample as designed contained 1,122 schools from a frame of 26,095 schools with grades 10 or 12 or both. The sampling frame was obtained from the 1978 list of U.S. elementary and secondary schools of the Curriculum Information Center, a private firm. This list was supplemented by CES lists of public and private elementary and secondary schools. Catholic and public schools were part of the regular strata; the Catholic schools were stratified by region and the public schools were stratified by region, racial composition, enrollment, and central-city/suburban/rural. The following special strata were oversampled to allow a sufficient number of cases for subgroup analyses: alternative schools, public Cuban Hispanic, Catholic Cuban Hispanic, other Hispanic, private high performance, other private non-Catholic, and Black Catholic.

Of the original sample, 811 schools participated. Hence, 204 substitution schools were added; substitution was carried out only within strata. No substitution occurred for students whose parents refused, who themselves refused, or who were absent on survey day and make-up day. The sample as realized involved 1,015 schools and 28,240 seniors.

Weights have been introduced for schools and for students, which give each school or each student a weight equal to the number of schools or students in the universe of schools or students which that school or student represents. Weights for schools were computed as the product of three factors. Factor one was the inverse of the probability of selection for the school under the assumption that it was part of the initial set of selections. Factor two was the estimated proportion of schools in the stratum which were "out of scope." This factor was used in order to compensate for the fact that the design specified that replacement selections were to be made for schools of this type. The third factor involved the ratio of the number of initially selected schools in each stratum to the final "in sample" schools from the stratum. This factor was employed to compensate for the differential cooperation rates (at the school level) across the various strata, and to adjust the total sample projections to reflect the total frame rather than only cooperating schools.

Weights for students consist of the product of the school weight and a within-school student weight. The within-school student weight consists of the number of students in the class represented by this student (the inverse of the probability of being drawn) times the ratio of the number of students sampled in that school divided by the number from whom questionnaire data were obtained. As is the case of the school weight, the second stage weight involves two underlying factors, compensation for overall and differential selection probabilities with respect to the initially selected sample, and adjustment for bias components induced by differential response rates. The student weight is the estimated number of students in grade 12 of American high schools represented by the student on whose record the weight appears. The weighting variable employed was FUWT, which includes 11,227 respondents to the base-year and first follow-up questionnaires. Further information on sampling and weighting can be found in the Information for Users manual.

Variables

Dependent variables Application to any institution was indicated by a response of 2 to FQ81 and a response of 1 to FE30 (NLS variables noted first throughout). Those applying to only one institution were determined with a response of 1 to FQ83AA and a response of 1 to FE30E. Those applying to two institutions were identified with a response of 1 to FQ84AA and a response of 1 to FE30I. Those applying to three or more institutions were identified with a response of 2 to FQ84AA and a response of 2 to FE30I. Admission to first choice institutions was determined with a response of 1, 2, or 3 to FQ82B and FE30B. Admission to second choice institutions was similarly determined with responses to FQ83B and FE30F, and admission to third choice institutions was determined by items FQ84B and FE30J. Students without a second choice were identified by a response of 1 (no choice) to FQ83AA and FE30E, and students without a third choice institution were similarly identified with items FQ84AA and FE30I.

Application for financial aid was determined with a response of 2 or 3 to FQ82C and FE30C for first choice institutions, FQ83C and FE30G for second choice institutions, and FQ84C and FE30K for third choice institutions. The same variables were used to determine receipt of an offer of aid, although a response of 3 was used for the NLS variables and a response of 1 was used in the HS&B variables. The percentage offered aid was determined by dividing the number of people selecting this response by the total number of those applying for aid.

Those offered each type of aid at first choice institutions were identified with items FQ82DA and FE30DS for scholarships, FQ82DB and FE30DL for loans, and FQ82DC and FE30DJ for work-assistance. For second choice institutions, the grant/scholarship items are FQ83DA and FE30HS, the loan items are FQ83DB and FE30HL, and the work-assistance items are FQ83DC and FE30HJ. These items report the amount of each type of offer; the percentages offered each type were determined by dividing the number of responses reporting an amount by the total of those responses plus those noting nothing was received (0 response). These same items were used to determine the amount of each type of aid offered.

Attendance at first choice institutions was determined by a response of 1 to items FQ82B and FE30E, attendance at second choice institutions was indicated by items FQ83B and FE30F, and attendance at third choice institutions was identified by items FQ84B and FE30J.

The importance of several factors in selecting a college were also examined. The factors and their respective items include college expenses (BQ68A and EB116A), availability of financial aid (BQ68B and EB116B), availability of specific courses or curriculum (BQ68C and EB116C), academic reputation (BQ68D and EB116D), athletic reputation (BQ68E and EB116E), and being able to live at home while attending college (BQ68K and EB116G). Responses 2 ("somewhat important") and 3 ("very important") were combined to create an "important" category.

Independent variables Sex was determined by the composite variables CSEX and SEX. Race/ethnicity was determined with the composite variables CRACE and RACE, although only the Hispanic, black and white categories were used. SES was determined with SESRAW and BYSES; the "low" category represents those in the first through the 24th percentile, the "middle" category includes those in the 25th through the 75th percentile, and the "high" category includes those in the 76th or higher percentile. Ability level was determined with APTITUDE and BYTEST; those in the 85th or higher percentile were labeled as "high" and the remaining students comprised the "other" category.

Additional variables used in multivariate analyses Several additional variables were used in the multivariate analyses, based on previous research on application and attendance. Involvement in student government was indicated by BQ10H and EB032K, and involvement in athletics was indicated by BQ10A and EB032A. For both of these variables, the responses were recoded such that 1="officer or leader" and "0=other." High school program was indicated by the composite variables HSPGM and HSPROG. The variables were used to construct two dummy variables (ACAD and VOCAT) such that 1=in that program. Early college decision was indicated by BQ27 and BB068A/BB068B. A response of 1 on BQ27 reflected a decision before the tenth grade. Both BB068A and BB068B were used to construct a new variable for HS&B, with a response of 1 to either item resulting in a response of 1 to the new variable, which indicated decision before the tenth grade.

Parental influence was indicated by BQ14A and EB049A/EB049B; counselors' influence was indicated by BQ14C and EB049C; teachers' influence was indicated by BQ14D and EB049D; and friends' influence was indicated by BQ14I and EB049E. These items had 3 response categories, 1 ("not at all"), 2 ("somewhat"), and 3 ("a great deal"). For the HS&B cohort, the greater of the two parental values was used. Grades were indicated by BQ5 and BB007, and the responses were converted to GPA equivalents as follows: 1=3.8, 2=3.5, 3=3.0, 4=2.5, 5=2.0, 6=1.5, 7=1.0, and 8=.5. Locus of control was indicated with LOCUS72 and FELOCUS, and self-concept was indicated by CONCPT72 and FECONCPT. Rural/urban was indicated by SCHQ40 and SCHURB. These items were recoded such that 1=rural and 0=others. The percentage of a school's graduates that attended college was indicated by SCHQ22 and SB011.

Institutional variables Type of institution was determined by matching the FICE codes for the institution selected by respondents in both cohorts with the respective FICE codes on the Tenison file for NLS and from HEGIS-15 for IHE and PSVD file for vocational-technical schools for HS&B. Details on the Tenison file can be found in Tenison (1976). If the needed

items were not available in HEGIS-15 for HS&B, then the Postsecondary Vocational Data Base was employed. Enrollment was determined by the appropriate items on the respective files. Several items in each of these files were combined to create the following type categories: two-year public, four-year public, four-year private, and other; this last category includes private two-year institutions, proprietary institutions, vocational/ technical institutions, and various professional and religious schools not fitting the above categories. A match between the state code of residence and the state code of school attended was used to determine whether a respondent attended an in-state school or not.

Total costs were determined from the respective files by summing the costs for tuition, fees, and room/board. The 1972 costs were adjusted to 1980 dollars by using the Consumer Price Index value of 1.97.

Mean SAT scores of entering freshmen were used as the indicator of postsecondary institution quality. However, these data were only available on the Tenison file, and hence those values were used for both cohorts. To the extent that one is willing to assume that relative qualities of institutions characterized by type and control did not change between 1972 and 1980, then changes in student application and attendance at institutions characterized by quality must reflect changes in student differences.

Analytical techniques

T-tests were used to determine statistical significance. All values reported are weighted values and conservative design effects of 1.3 for NLS and 2.0 for HS&B were used in the calculations of the t-tests. The t-tests test for the statistical significance of the changes between the two cohorts. The level of statistical significance used was .05 (2-tailed). All statistically significant differences between the two cohorts are noted on the tables with an asterisk. However, intra-cohort differences (e.g., males versus females for 1972) were also assessed for statistical significance with t-tests, but these statistically significant differences are not noted with asterisks in the tables. Instead, only those differences which are statistically significant are reviewed in the text. Similarly, only statistically significant cohort differences are examined. In other words, if a difference is examined and reported, it can be assumed to be statistically significant. Occasionally a clearly labelled non-statistically significant difference is included for comparison purposes.

TABLES TO THE REPORT

Table 2.1.1.--Percentages of 1972 and 1980 high school seniors applying to any postsecondary education institution and to one, two, or three institutions[1]

Number of institutions applied to	1972	1980
One or more[2]	46.5	59.8*
Exactly one	58.5	52.8*
Exactly two	23.4	21.5
Three or more	18.1	25.7*
	100.0	100.0

* $p < .05$

1. In this and all other tables, the asterisk refers to a statistically significant difference between the 1972 and the 1980 cohorts. A value of .05 means that the probability of observing a difference in the magnitude, under a null hypothesis of no difference, is less than 5% for a two-tailed test. Sample sizes associated with the values in the table are found in the Tables to the Report in tables with the same number but preferenced with an "A." The corresponding table for this table, for example, is Table A.2.1.1. Variables for each cohort are assumed to be independent so that covariances of similar variables between cohorts are expected to be close to zero.

2. The base for "one or more" is the number of persons in the total sample. The base for each of the other three categories includes only those making an application.

Table 2.1.2.--Percentages of 1972 and 1980 high school seniors applying to any postsecondary education institution and to one, two, or three institutions, by sex

	Sex			
	Male		Female	
Number of institutions applied to	1972	1980	1972	1980
One or more	46.1	56.2*	47.0	63.2*
Exactly one	57.4	51.8*	59.6	53.6*
Exactly two	24.2	21.2	22.5	21.9
Three or more	18.4	27.0*	17.9	24.5*
	100.0	100.0	100.0	100.0

* $p < .05$

Table 2.1.3.--Pecentages of 1972 and 1980 high school seniors applying to any postsecondary education institution and to one, two, or three institutions, by race

	Race/ethnicity					
	Hispanic		Black		White	
Number of institutions applied to	1972	1980	1972	1980	1972	1980
One or more	37.1	50.3*	42.4	61.2*	47.9	59.9*
Exactly one	64.9	54.4*	53.7	44.9*	58.9	54.0*
Exactly two	22.4	20.4	23.3	23.7	23.4	21.2
Three or more	12.7	25.2*	23.0	31.4*	17.7	24.8*
	100.0	100.0	100.0	100.0	100.0	100.0

* $p < .05$

Table 2.1.4.--Percentages of 1972 and 1980 high school seniors applying to any postsecondary education institution and to one, two, or three institutions, by SES

	SES[1]					
	Low		Middle		High	
Number of institutions applied to	1972	1980	1972	1980	1972	1980
One or more	31.5	46.1*	44.1	60.3*	67.9	81.2*
Exactly one	63.6	58.4	62.4	57.4*	51.0	44.3*
Exactly two	23.2	18.1*	22.0	21.2	25.2	23.3
Three or more	13.2	23.5*	15.6	21.4	23.8	32.4*
	100.0	100.0	100.0	100.0	100.0	100.0

* $p < .05$

1. Low = less than 25th percentile, middle = 25-75th percentile, and high = greater than 75th percentile.

Table 2.1.5.--**Percentages of 1972 and 1980 high school seniors applying to any postsecondary education institution and to one, two, or three institutions, by ability level**

Number of institutions applied to	Ability level[1] High 1972	High 1980	Other 1972	Other 1980
One or more	79.7	90.1*	42.3	57.4*
Exactly one	45.6	43.0	61.9	56.5*
Exactly two	26.6	23.5	23.0	20.8*
Three or more	27.8	33.5	15.1	22.7*
	100.0	100.0	100.0	100.0

* $p < .05$

1. High = 85th percentile or more, other = less than 85th percentile.

Table 2.1.6.--Percentages of 1972 and 1980 high school seniors applying to one or more postsecondary education institutions, by aptitude and SES.

	1972	1980
Low SES		
Low aptitude	21.7	36.7*
Middle aptitude	34.5	50.8*
High aptitude	60.0	71.9*
Middle SES		
Low aptitude	24.4	35.7*
Middle aptitude	43.5	60.9*
High aptitude	68.4	86.6*
High SES		
Low aptitude	37.2	50.6
Middle aptitude	58.0	78.4*
High aptitude	81.6	91.1*

*$p < .05$

Table 2.2.1.--Percentages of 1972 and 1980 high school seniors applying to each type of postsecondary education institution as their first, second, and third choices

	Choices					
	First		Second		Third	
Type	1972	1980	1972	1980	1972	1980
2 yr. pub.	21.6	23.2	12.4	11.2	10.1	6.2*
4 yr. pub.	44.5	42.4	50.1	52.3	48.3	51.6
4 yr. priv.	22.1	24.5	30.6	29.7	37.5	34.3
Other[1]	11.8	9.9*	6.9	6.8	4.1	7.9*
	100.0	100.0	100.0	100.0	100.0	100.0

* $p < .05$

1. "Other" consists of two-year private, noncollegiate vocational-technical, and proprietory schools.

Table 2.2.2.--Percentages of 1972 and 1980 high school seniors applying to each type of first choice postsecondary education institution, by sex

	Sex			
	Male		Female	
Type	1972	1980	1972	1980
2 yr. pub.	21.9	22.5	21.4	23.7
4 yr. pub.	46.0	43.7	43.0	41.4
4 yr. priv.	24.0	25.3	20.3	23.7
Other	8.1	8.5	15.3	11.2*
	100.0	100.0	100.0	100.0

* $p < .05$

Table 2.2.3.--Percentages of 1972 and 1980 high school seniors applying to each type of first choice postsecondary education institution, by race

	Race/ethnicity					
	Hispanic		Black		White	
Type	1972	1980	1972	1980	1972	1980
2 yr. pub.	41.2	32.9*	18.1	20.8	20.9	22.9
4 yr. pub.	37.6	36.1	44.7	45.7	45.1	42.0
4 yr. priv.	12.9	20.7*	23.9	22.9	22.3	25.2
Other	8.3	10.3	13.3	10.6	11.7	9.9
	100.0	100.0	100.0	100.0	100.0	100.0

*$p < .05$

Table 2.2.4.--Percentages of 1972 and 1980 high school seniors applying to each type of first choice postsecondary education institution, by SES

	SES					
	Low		Middle		High	
Type	1972	1980	1972	1980	1972	1980
2 yr. pub.	25.6	31.9*	25.8	26.3	14.3	14.1
4 yr. pub.	39.4	36.8	42.5	41.3	49.3	46.7
4 yr. priv.	16.7	16.2	17.7	21.2	30.5	33.6
Other	18.3	15.1	14.0	11.2	5.9	5.6
	100.0	100.0	100.0	100.0	100.0	100.0

*$p < .05$

Table 2.2.5.--Percentages of 1972 and 1980 high school seniors applying to each type of first choice postsecondary education institution, by ability level

	Ability level			
	High		Other	
Type	1972	1980	1972	1980
2 yr. pub.	9.3	8.1	25.2	27.6
4 yr. pub.	51.7	49.8	43.1	40.7
4 yr. priv.	34.5	39.5	17.7	19.2
Other	4.5	2.6	14.0	12.5
	100.0	100.0	100.0	100.0

Table 2.3.1.--Percentages of 1972 and 1980 cohorts applying to each first choice/second choice postsecondary education institution types combination for those with two choices

First/Second choice type	1972	1980
2 yr. pub./Other	11.0	7.2
2 yr. pub./2 yr. pub.	42.1	20.7*
2 yr. pub./4 yr. pub.	34.3	62.1*
2 yr. pub./4 yr. priv.	12.6	10.0
4 yr. pub./Other	2.9	2.9
4 yr. pub./2 yr. pub.	10.0	11.2
4 yr. pub./4 yr. pub.	64.3	68.1
4 yr. pub./4 yr. priv.	22.8	17.8*
4 yr. priv./Other	3.3	2.3
4 yr. priv./2 yr. pub.	5.5	6.6
4 yr. priv./4 yr. pub.	39.4	33.0
4 yr. priv./4 yr. priv.	51.7	58.1
Other/Other	48.9	53.1
Other/2 yr. pub.	19.3	16.4
Other/4 yr. pub.	19.3	20.8
Other/4 yr. priv.	12.5	9.7

*$p < .05$

Table 2.4.1.--Mean SAT scores of student bodies at the first, second, and third choice postsecondary education institutions of 1972 and 1980 high school seniors

Choice	1972	1980
First	987.3	988.5
Second	1,013.8	1,017.6
Third	1,034.5	1,045.4*

*$p < .05$

Table 2.4.2.--Mean SAT scores of first choice postsecondary education institutions selected by 1972 and 1980 high school seniors, separately by each control variable

Variable	1972	1972
Sex		
Male	995.4	997.0
Female	978.8	981.2
Race/ethnicity		
Hispanic	950.9	960.3
Black	899.1	918.1
White	996.3	999.7
SES		
Low	938.1	923.0*
Middle	966.8	970.1
High	1,031.2	1,038.8
Ability level		
High	1,067.2	1,069.9
Other	961.0	957.3

* $p < .05$

Table 2.4.3.--Mean SAT scores of first choice postsecondary education institutions selected by 1972 and 1980 high school seniors, by institutional type

Type	1972	1980
2 yr. pub.	871.4	873.4
4 yr. pub.	1,012.2	1,009.5
4 yr. priv.	1,068.7	1,067.9
Other	879.7	864.2

Table 2.4.4.--Percentages of 1972 and 1980 high school seniors whose first, second, and third choice postsecondary education institutions are in-state

Choice	1972	1980
First	81.5	81.7
Second	75.1	73.1
Third	70.1	63.7

Table 2.4.5.--Percentages of 1972 and 1980 high school seniors whose first choice postsecondary education institutions are in-state, separately by each control variable

Variable	1972	1980
Sex		
Male	80.7	81.5
Female	82.2	81.8
Race/ethnicity		
Hispanic	92.7	90.9
Black	76.6	80.4
White	81.6	81.0
SES		
Low	87.6	89.4
Middle	86.5	86.2
High	72.7	70.7
Ability level		
High	72.7	72.3
Other	84.8	85.0

Table 2.4.6.--Percentages of 1972 and 1980 high school seniors whose first choice postsecondary education institutions are in-state, by institutional type

Type	1972	1980
2 yr. pub.	96.1	96.0
4 yr. pub.	87.2	88.1
4 yr. priv.	54.4	55.6
Other	77.4	80.0

Table 2.4.7.--Mean cost at first, second, and third choice postsecondary education institutions selected by 1972 and 1980 high school seniors

Choice	1972[1] Mean	1980 Mean
First	$3,746.90	$3,393.90*
Second	$4,161.40	$3,903.90*
Third	$4,550.20	$4,221.20*

*$p < .05$

1. Cost data for 1972 are inflated to 1980 dollars using the Consumer Price Index of 1.97.

Table 2.4.8.--Mean cost at first choice postsecondary education institutions selected by 1972 and 1980 high school seniors, separately by each control variable

Variable	1972	1980
Sex		
Male	$3,811.30	$3,443.70*
Female	$3,681.10	$3,351.90*
Race/ethnicity		
Hispanic	$2,874.90	$2,974.90
Black	$3,557.60	$3,205.20*
White	$3,790.80	$3,458.00*
SES		
Low	$3,280.40	$2,926.80*
Middle	$3,500.10	$3,179.80*
High	$4,226.30	$3,908.20*
Ability level		
High	$4,556.60	$4,203.30*
Other	$3,439.10	$3,098.40*

* $p < .05$

Table 2.4.9.--Mean cost at first choice postsecondary education institutions selected by 1972 and 1980 high school seniors, by institutional type

Type	1972	1980
2 yr. pub.	$2,220.60	$2,022.80
4 yr. pub.	$3,197.40	$2,675.50*
4 yr. priv.	$6,315.40	$5,872.00
Other	$3,921.10	$3,836.10

*$p < .05$

Table 2.4.10.--Mean enrollment size of first, second, and third choice postsecondary education institutions selected by 1972 and 1980 high school seniors

Choice	1972	1980
First	10,503	10,970
Second	11,384	12,160
Third	11,235	11,247

Table 2.4.11.--Mean enrollment size of first choice postsecondary education institutions selected by 1972 and 1980 high school seniors, separately by each control variable

Variable	1972	1980
Sex		
Male	10,953	11,351
Female	10,029	9,937
Race/ethnicity		
Hispanic	12,352	12,791
Black	9,346	9,266
White	10,556	10,490
SES		
Low	8,859	8,691
Middle	9,804	10,098
High	11,994	12,512
Ability level		
High	12,409	12,815
Other	9,952	9,924

Table 2.4.12.--Mean enrollment size of first choice postsecondary education institutions selected by 1972 and 1980 high school seniors, by institutional type

Type	1972	1972
2 yr. pub.	5,834	7,620*
4 yr. pub.	15,768	17,148*
4 yr. priv.	5,447	6,024
Other	1,151	637*

*$p < .05$

Table 2.5.1.--Percentages of 1972 and 1980 high school seniors noting that each of several factors is important in selecting a college[1]

Factors	1972	1980
College expenses	85.9	88.2*
Available of aid	59.5	76.8*
Available of curriculum	94.8	97.6*
Academic reputation	92.0	95.7*
Athletic reputation	32.8	47.2*
Able live home	39.4	45.3*

*$p < .05$

1. "Somewhat important" and "very important" responses were combined to determine the values presented.

Table 2.5.2.--Percentages of 1972 and 1980 high school seniors noting that each of several factors is important in selecting a college, by type of first choice postsecondary education institution[1]

	Type					
	2 yr. public		4 yr. public		4 yr. private	
Factors	1972	1980	1972	1980	1972	1980
College expenses	86.9	89.3	89.2	90.9	79.4	80.6
Avail. aid	56.8	77.8*	58.8	76.9*	63.5	73.7*
Avail. curric.	91.3	96.2	95.0	97.3*	96.8	98.6*
Acad. reputat.	84.6	93.7*	93.1	96.4*	95.5	96.2
Athlet. reputat.	31.4	46.7*	33.5	49.2*	32.3	46.9*
Able live home	72.5	72.4	34.1	38.7	24.7	31.4*

*$p < .05$

1. These items were not asked of those planning to attend other institutions.

Table 3.1.1.--Percentages of 1972 and 1980 high school seniors applying for financial aid at first, second, and third choice postsecondary education institutions

Choice	1972	1980
First	32.7	51.8*
Second	29.3	36.8*
Third	27.8	30.9

*$p < .05$

Table 3.1.2.--Percentages of 1972 and 1980 high school seniors applying for financial aid at each type of first, second, and third choice postsecondary education institution

	Choice					
	First		Second		Third	
Type	1972	1980	1972	1980	1972	1980
2 yr. pub.	19.8	43.4*	19.7	27.9	14.1	32.8
4 yr. pub.	33.8	52.6*	25.6	33.5*	23.1	28.8
4 yr. priv.	49.1	61.4*	41.8	45.7	40.0	33.6
Other	27.0	47.4*	20.1	43.4*	11.6	25.9

*$p < .05$

Table 3.1.3.--Percentages of 1972 and 1980 high school seniors applying for financial aid at their first choice postsecondary education institution, separately by each control variable

Variable	1972	1980
Sex		
Male	31.9	51.4*
Female	33.5	52.2*
Race/ethnicity		
Hispanic	51.8	59.8*
Black	55.7	72.3*
White	30.0	48.8*
SES		
Low	47.7	65.2*
Middle	33.4	55.0*
High	24.9	41.6*
Ability level		
High	42.4	58.0*
Other	29.8	51.6*

*$p < .05$

Table 3.1.4--Percentages of 1972 and 1980 high school seniors applying for financial aid at their first choice postsecondary education institution, by ability level and SES.

SES/aptitude category	1972	1980
Low SES		
Low aptitude	50.9	61.1
Middle aptitude	44.7	66.4*
High aptitude	55.6	72.0*
Middle SES		
Low aptitude	22.0	54.3*
Middle aptitude	28.1	50.9*
High aptitude	43.2	61.4*
High SES		
Low aptitude	14.1	24.7
Middle aptitude	14.8	39.1*
High aptitude	31.8	48.2*

* $p < .05$

Table 3.2.1.--Percentages of 1972 and 1980 high school seniors offered aid among those who applied for aid at first, second, and third choice postsecondary education institutions

Choice	1972	1980
First	71.5	75.5*
Second	65.5	72.7
Third	59.2	73.3*

*$p < .05$

Table 3.2.2.--Percentages of 1972 and 1980 high school seniors offered aid among those who applied for aid at each type of first, second, and third choice postsecondary education institutions

	Choice					
	First		Second		Third	
Type	1972	1980	1972	1980	1972	1980
2 yr. pub.	73.3	77.9	69.5	77.6	65.7	79.3
4 yr. pub.	65.4	72.7*	59.1	71.0*	54.1	69.6
4 yr. priv.	73.9	79.0	70.2	72.9	61.7	74.9
Other	87.0	73.3*	73.2	76.2	82.7	83.1

*$p < .05$

Table 3.2.3.--Percentages of 1972 and 1980 high school seniors offered aid among those who applied for aid at their first choice postsecondary education institution, separately by each control variable

Variable	1972	1980
Sex		
Male	68.0	73.8
Female	74.6	76.8
Race/ethnicity		
Hispanic	82.3	80.8
Black	74.4	82.7*
White	70.3	73.8
SES		
Low	82.3	85.8
Middle	72.5	76.8
High	59.9	66.2
Ability level		
High	66.7	73.5
Other	73.5	76.0

*$p < .05$

Table 3.3.1.--Percentages of 1972 and 1980 high school seniors offered a grant, a loan, and/or work-study aid among those who were offered aid at first and second choice postsecondary education institutions

	Choice			
	First		Second	
Aid type	1972	1980	1972	1980
Grant	65.2	66.5	79.1	77.9
Loan	60.4	60.6	50.4	60.3*
Work-study	30.4	32.8	30.5	40.8*

*$p < .05$

Table 3.3.2.--Percentages of 1972 and 1980 high school seniors offered a grant, a loan, and/or work-study aid among those who were offered aid at each type of first choice postsecondary education institution

	Type aid					
	Grant		Loan		Work-study	
Type	1972	1980	1972	1980	1972	1980
2 yr. pub.	62.6	67.3	46.1	49.7	34.8	31.1
4 yr. pub.	62.5	62.7	62.0	59.8	28.4	31.0
4 yr. priv.	80.3	77.1	60.1	66.4	35.5	40.0
Other	42.7	49.2	70.2	71.7	20.8	22.4

Table 3.3.3.--Percentages of 1972 and 1980 high school seniors offered a grant, a loan, and/or work-study aid among those who were offered aid at their first choice postsecondary education institution, separately by each control variable

	Type aid					
	Grant		Loan		Work-study	
Variable	1972	1980	1972	1980	1972	1980
Sex						
Male	67.5	64.8	60.6	61.8	26.1	29.9
Female	63.2	67.8	60.3	59.6	34.1	34.9
Race/ethnicity						
Hispanic	54.4	71.7*	62.5	56.5	32.9	36.2
Black	56.1	67.3*	71.8	58.0*	34.4	41.4
White	67.1	65.7	58.5	62.1	28.7	30.8
SES						
Low	56.6	69.1*	66.6	53.8*	34.4	37.6
Middle	64.9	66.0	61.1	61.3	30.5	32.3
High	75.9	63.7	51.8	66.4*	25.5	30.9
Ability level						
High	80.5	78.5	56.2	58.7	28.9	36.2
Other	58.2	62.8	63.8	61.8	31.6	32.1

*$p < .05$

Table 3.4.1.--Mean percentage of total aid offered comprised of grants, loans, and work-study aid at first and second choice postsecondary education institutions

	Choice			
	First		Second	
Aid type	1972	1980	1972	1980
Grant	45.6	44.6	58.4	50.2
Loan	40.5	42.6	29.3	36.7
Work-study	13.9	12.8	12.3	13.1
	100.0	100.0	100.0	100.0

Table 3.4.2.--Mean percentage of total aid offered comprised of grants, loans, and work-study aid at first choice postsecondary education institutions

	Type aid						
	Grant		Loan		Work-study		Total
Type	1972	1980	1972	1980	1972	1980	1972 & 1980
2 yr. pub.	45.9	49.1	33.9	36.7	20.2	14.3	100
4 yr. pub.	43.7	42.7	42.6	44.0	13.8	13.3	100
4 yr. priv.	55.4	48.6	31.7	39.0	13.0	12.4	100
Other	30.0	30.4	59.8	61.2	10.2	8.4	100

Table 3.4.3.--Mean percentage of total aid offered comprised of grants, loans, and work-study aid at first choice postsecondary education institutions, separately by each control variable

	Type aid					
	Grant		Loan		Work-study	
Variable	1972	1980	1972	1980	1972	1980
Sex						
Male	48.7	44.4	40.4	44.1	10.9	11.5
Female	42.9	44.8	40.6	41.4	16.4	13.8
Race/ethnicity						
Hispanic	38.8	48.2	46.6	37.6	14.6	14.2
Black	36.5	43.9	48.4	38.9*	15.2	17.1
White	47.5	44.0	39.3	44.2	13.2	11.8
SES						
Low	37.6	48.4*	46.0	36.0*	16.4	15.6
Middle	44.5	43.0	41.4	43.4	14.2	13.6
High	57.3	42.0*	32.2	48.2*	10.5	9.8
Ability level						
High	57.1	51.3	31.3	34.8	11.6	13.9
Other	39.7	41.3	45.3	45.2	15.1	13.3

*$p < .05$

Table 3.5.1.--Mean percentage of total aid offered comprised of loans, and work-study aid at first and second choice postsecondary education institutions

	Choice			
	First		Second	
Aid type	1972	1980	1972	1980
Grant	39.6	34.8	42.4	32.7
Loan	43.0	49.0	38.5	40.9
Work-study	34.2	28.0	31.7	23.0

NOTE.--Columns do not total 100 percent because the aid types are not mutually exclusive. That is, students may receive one, two, or all three types of aid.

Table 3.5.2.--Mean percentage of costs funded by grants, loans, and work-study aid at each type of first choice postsecondary education institution

	Type aid					
	Grant		Loan		Work-study	
Type	1972	1980	1972	1980	1972	1980
2 yr. pub.	53.6	36.6*	63.5	67.5	63.5	39.0*
4 yr. pub.	42.7	40.2	48.3	56.2	39.3	33.2
4 yr. priv.	33.5	28.2	28.5	28.7	18.0	16.4
Other	31.8	25.6	49.8	47.6	36.4	20.8*

*$p < .05$

Table 3.5.3.--Mean percentage of costs funded by grants, loans, and work-study aid at first choice postsecondary education institutions, separately by each control variable

	Type aid					
	Grant		Loan		Work-study	
Variable	1972	1980	1972	1980	1972	1980
Sex						
Male	40.9	35.9	42.5	50.3	31.3	28.7
Female	38.5	34.0	43.4	48.1	36.2	27.6
Race/ethnicity						
Hispanic	61.5	37.5*	56.3	49.9	39.0	32.9
Black	53.6	40.2*	46.3	45.1	40.1	30.5
White	35.8	33.2	41.6	49.8	32.1	26.6
SES						
Low	45.6	38.0	40.2	45.6	40.6	31.5
Middle	40.4	33.7	43.3	49.6	35.7	28.1
High	33.5	34.9	35.4	50.9	22.2	20.6
Ability level						
High	32.6	34.8	32.8	43.0	23.3	21.9
Other	43.5	34.5*	48.7	51.2	38.7	30.0

*$p < .05$

Table 3.6.1.--Mean percentage of costs covered by total aid offered at first and second choice postsecondary education institutions, overall and by institutional type

	Choice			
	First		Second	
	1972	1980	1972	1980
Overall	63.8	64.8	64.4	62.1
2 yr. pub.	84.8	75.5	99.0	73.1*
4 yr. pub.	67.9	71.7	66.8	67.6
4 yr. priv.	51.2	48.9	53.8	49.6
Other	60.6	54.8	74.2	72.7

*$p < .05$

Table 3.6.2.--Mean percentage of costs covered by total aid offered at first choice postsecondary education institutions, separately by each control variable

Variable	1972	1980
Sex		
Male	62.9	65.3
Female	64.6	64.3
Race/ethnicity		
Hispanic	80.9	71.4
Black	78.2	70.1
White	59.4	63.1
SES		
Low	73.7	66.7
Middle	65.3	65.3
High	50.7	63.7*
Ability level		
High	53.0	61.2
Other	69.8	66.5

*$p < .05$

Table 4.1.1.--Percentages of 1972 and 1980 high school seniors attending their first choice postsecondary education institution, overall and for each institutional type

% attending	1972	1980
Overall	66.6	72.5*
2 yr. pub.	73.3	83.6*
4 yr. pub.	67.4	71.4
4 yr. priv.	59.6	63.8
Other	69.1	73.1

*$p < .05$

Table 4.1.2.--Percentages of 1972 and 1980 high school seniors attending their first choice postsecondary education institution, separately by each control variable

Variable	1972	1980
Sex		
Male	67.3	72.6*
Female	65.9	72.4*
Race/ethnicity		
Hispanic	64.2	70.2
Black	53.6	61.7*
White	68.3	74.5*
SES		
Low	58.8	68.9*
Middle	66.7	73.7*
High	69.8	75.8*
Ability level		
High	71.2	72.6
Other	64.7	74.4*

*$p < .05$

Table 4.1.3.--Percentages of 1972 and 1980 high school seniors attending their first choice postsecondary education institution, by ability level and SES.

	1972	1980
Low SES		
Low aptitude	52.9	60.1
Middle aptitude	56.2	73.0*
High aptitude	67.9	73.1
Middle SES		
Low aptitude	59.9	64.3
Middle aptitude	65.8	76.1*
High aptitude	70.5	75.5
High SES		
Low aptitude	61.6	76.2
Middle aptitude	67.0	80.8*
High aptitude	71.1	72.4

* $p < .05$

Table 4.2.1.--Percentages of 1972 and 1980 high school seniors attending their first choice postsecondary education institution for those applying to only one institution or more than one institution

Number of institutions applied to:	1972	1980
One	78.8	86.3*
Two or more	49.0	53.9

*$p < .05$

Table 4.2.2.--Percentages of 1972 and 1980 high school seniors attending their first choice postsecondary education institution for those applying to only one institution or more than one institution, by type of first choice institution

	# applications			
	One		Two or more	
Type	1972	1980	1972	1980
2 yr. pub.	79.4	87.4*	47.5	66.7*
4 yr. pub.	83.4	88.1*	50.0	54.1
4 yr. priv.	79.1	84.7	48.0	50.5
Other	75.6	79.9	48.2	51.0

*$p < .05$

Table 4.2.3.--Percentages of 1972 and 1980 high school seniors attending their first choice postsecondary education institution for those applying to only one institution or more than one institution, separately by each control variable

	# applications			
	One		Two or more	
Variable	1972	1980	1972	1980
Sex				
Male	80.8	87.1*	48.6	53.3
Female	76.9	85.6*	49.4	54.4
Race/ethnicity				
Hispanic	72.6	80.8*	48.0	53.0
Black	67.7	79.1*	36.9	42.6
White	80.2	87.8*	50.9	56.2
SES				
Low	68.4	78.3*	41.4	50.3
Middle	78.0	85.8*	47.6	53.9
High	86.1	94.4*	52.8	59.2
Ability level				
High	88.7	92.7	56.3	56.6
Other	76.2	85.2*	45.6	56.5*

*$p < .05$

Table 4.3.1.--Percentages of 1972 and 1980 high school seniors offered financial aid for those attending their first, second, and third choice postsecondary education institution

Choice	1972	1980
First	25.3	42.9*
Second	28.9	42.4*
Third	27.2	36.6

*$p < .05$

Table 4.3.2.--Percentages of 1972 and 1980 high school seniors offered financial aid for those attending their first choice postsecondary education institution, by institutional type

Type	1972	1980
2 yr. pub.	15.3	34.6*
4 yr. pub.	24.2	43.1*
4 yr. priv.	39.4	54.5*
Other	26.0	38.1

*$p < .05$

Table 4.3.3.--Percentages of 1972 and 1980 high school seniors offered financial aid for those attending their first choice postsecondary education institution, separately by each control variable

Variable	1972	1980
Sex		
Male	23.1	41.1*
Female	27.5	44.3*
Race/ethnicity		
Hispanic	45.7	54.5
Black	52.0	70.7*
White	22.7	39.1*
SES		
Low	45.5	64.3*
Middle	26.9	46.2*
High	15.7	29.7*
Ability level		
High	29.2	46.1*
Other	23.3	43.0*

*$p < .05$

Table 4.4.1.--Percentages of 1972 and 1980 high school seniors who attended an institution at which they were offered aid, overall and separately by each control variable

Variable	1972	1980
Overall	84.1	91.7*
Sex		
Male	84.6	92.5*
Female	83.6	91.0*
Race/ethnicity		
Hispanic	77.3	90.4*
Black	81.5	90.0*
White	85.3	92.1*
SES		
Low	79.3	89.6*
Middle	86.0	91.6*
High	85.4	94.0*
Ability level		
High	86.6	91.8
Other	81.7	91.5*

*$p < .05$

Table 4.5.1.--Percentages of 1972 and 1980 high school seniors who did not attend their first choice postsecondary education institution but who attended each type of their second or third choice postsecondary education institution, by first choice type

	First choice type							
	2 yr.pub.		4 yr.pub.		4 yr.priv.		Other	
Type attended	1972	1980	1972	1980	1972	1980	1972	1980
2 yr. pub.	64.0	45.5	21.1	26.8	9.1	9.9	25.3	28.2
4 yr. pub.	14.4	15.5	52.3	51.8	41.1	36.1	8.9	14.3
4 yr. priv.	7.2	24.0	21.5	13.4*	45.9	50.0	8.1	14.5
Other	14.4	15.0	5.1	8.0	3.9	4.0	57.7	43.0

*$p < .05$

Table 4.5.2.--Difference between the mean SAT scores of first choice institutions and institutions actually attended for 1972 and 1980 seniors not attending their first choice institution, overall and separately for each control variable

Variable	1972	1980
Overall	41.9	59.5
Sex		
Male	40.5	52.9
Female	43.4	64.5
Race/ethnicity		
Hispanic	46.7	127.3*
Black	-13.5[1]	55.7
White	48.0	54.6
SES		
Low	42.0	80.3
Middle	41.2	56.1*
High	42.7	46.3
Ability level		
High	48.4	46.2
Other	37.4	60.3

*$p < .05$

1. The negative sign indicates that the mean SAT score of the institution attended was larger than the mean SAT score of the first choice institution.

TABLES TO APPENDIX A

Table A.1.1.--Regression analysis for application to any postsecondary education institution for 1972 and 1980 high school seniors, using the basic control variables

	1972			1980		
	Param. est.	Prob.	Beta	Param. est.	Prob.	Beta
Hispanic	.156	.000	.056	.139	.000	.065
Black	.230	.000	.130	.256	.000	.167
Sex	-.015	.056	-.015	-.084	.000	-.087
SES	.117	.000	.162	.117	.000	.175
Aptitude	.006	.000	.364	.021	.000	.376
R^2		.175			.200	

Table A.1.2.--Regression analysis for application to any postsecondary education institution for 1972 and 1980 high school seniors, using the basic and additional control variables

	1972			1980		
	Param. est.	Prob.	Beta	Param. est.	Prob.	Beta
Hispanic	.090	.000	.032	.061	.013	.027
Black	.145	.000	.078	.124	.000	.076
SES	.072	.000	.100	.064	.000	.100
Aptitude	.003	.000	.195	.006	.000	.117
Par. infl.	.032	.000	.041	.031	.000	.042
Couns. infl.	.050	.000	.065	.070	.000	.100
Tchr. infl.	.014	.024	.019		NS	
Athl. invol.	.026	.046	.016	.042	.004	.032
Stud. govt. inv.	.038	.021	.018		NS	
Early coll. dec.	.076	.000	.076	.239	.000	.223
Grades	.059	.000	.079	.112	.000	.160
Locus control	.019	.001	.028	.023	.007	.031
Acad. prog.	.141	.000	.141	.129	.000	.138
Vocat. prog.	-.077	.000	-.064	-.064	.000	-.056
% grads. coll.	.008	.000	.029	.004	.033	.024
R^2		.236			.353	

Key:

Par. infl. = parental influence
Couns. infl. = counselors' influence
Tchr. infl. = teachers' influence
Athl. invol. = athletic involvement in high school
Stud. govt. inv. = student government involvement in high school
Early coll. dec. = decided to attend college before the tenth grade
Acad. prog. = in academic curriculum
Vocat. prog. = in vocational curriculum
% grads. coll. = % of school's graduates that attended college
NS = not statistically significant

Table A.2.1.1.--Numbers of 1972 and 1980 high school seniors applying to any postsecondary education institution and to one, two, or three institutions

Number of institutions applied to	1972	1980
One or more	9,853	7,238
Exactly one	5,769	3,822
Exactly two	2,299	1,556
Three or more	1,785	1,860
Total	9,853	7,238

Table A.2.1.2.--Numbers of 1972 and 1980 high school seniors applying to any postsecondary education institution and to one, two, or three institutions, by sex

Number of institutions applied to	Sex: Male 1972	Male 1980	Female 1972	Female 1980
One or more	4,830	3,159	5,020	4,079
Exactly one	2,772	1,636	2,992	2,187
Exactly two	1,169	670	1,130	891
Three or more	889	853	898	1,001
Total	4,830	3,159	5,020	4,079

Table A.2.1.3.--Numbers of 1972 and 1980 high school seniors applying to any postsecondary education institution and to one, two, or three institutions, by race

Number of institutions applied to	Race/ethnicity					
	Hispanic		Black		White	
	1972	1980	1972	1980	1972	1980
One or more	353	1,258	1,211	1,913	7,830	3,619
Exactly one	227	684	650	859	4,612	1,954
Exactly two	78	257	282	451	1,832	767
Three or more	48	317	279	601	1,386	898
Total	353	1,258	1,211	1,913	7,830	3,619

Table A.2.1.4.--Numbers of 1972 and 1980 high school seniors applying to any postsecondary education institution and to one, two, or three institutions, by SES

Number of institutions applied to	SES					
	Low		Middle		High	
	1972	1980	1972	1980	1972	1980
One or more	1,946	2,184	4,528	3,040	3,367	1,665
Exactly one	1,238	1,275	2,826	1,745	1,717	739
Exactly two	451	395	996	644	848	387
Three or more	257	514	706	651	802	539
	1,946	2,184	4,528	3,040	3,367	1,665

Table A.2.1.5.--Numbers of 1972 and 1980 high school seniors applying to any postsecondary education institution and to one, two, or three institutions, by ability level

Number of institutions applied to	Ability level: High 1972	High 1980	Other 1972	Other 1980
One or more	1,547	1,151	5,398	5,244
Exactly one	707	495	3,341	2,963
Exactly two	413	270	1,242	1,091
Three or more	447	386	815	1,190
Total	1,547	1,151	5,398	5,244

Table A.2.1.6.--Numbers of 1972 and 1980 high school seniors applying to one or more postsecondary education institutions, by aptitude and SES

	1972	1980
Low SES		
Low aptitude	2,164	1,625
Middle aptitude	1,631	1,322
High aptitude	429	527
Middle SES		
Low aptitude	1,848	1,104
Middle aptitude	3,520	2,115
High aptitude	1,728	899
High SES		
Low aptitude	361	204
Middle aptitude	1,445	802
High aptitude	1,733	795

Table A.2.2.1.--Number of 1972 and 1980 high school seniors applying to each type of postsecondary education institution for first, second, and third choices

	Choices					
	First		Second		Third	
Type	1972	1980	1972	1980	1972	1980
2 yr. pub.	2,069	1,679	503	384	177	118
4 yr. pub.	4,262	3,069	2,032	1,795	848	982
4 yr. priv.	2,116	1,773	1,241	1,021	658	653
Other	1,130	717	280	233	72	150
Total	9,577	7,238	4,056	3,433	1,755	1,903

Table A.2.2.2.--Numbers of 1972 and 1980 high school seniors applying to each type of first choice postsecondary education institution, by sex

	Sex			
	Male		Female	
Type	1972	1980	1972	1980
2 yr. pub.	1,034	711	1,038	967
4 yr. pub.	2,173	1,380	2,086	1,689
4 yr. priv.	1,134	799	985	967
Other	382	269	742	456
Total	4,723	3,159	4,851	4,079

Table A.2.2.3.--Number of 1972 and 1980 high school seniors applying to each type of first choice postsecondary education institution, by race

	Race/ethnicity					
	Hispanic		Black		White	
Type	1972	1980	1972	1980	1972	1980
2 yr. pub.	141	414	210	398	1,594	829
4 yr. pub.	129	454	518	874	3,440	1,520
4 yr. priv.	44	260	277	438	1,701	912
Other	28	130	154	203	892	358
Total	342	1,258	1,159	1,913	7,627	3,619

Table A.2.2.4.--Number of 1972 and 1980 high school seniors applying to each type of first choice postsecondary education institution, by SES

	SES					
	Low		Middle		High	
Type	1972	1980	1972	1980	1972	1980
2 yr. pub.	474	695	1,133	800	475	235
4 yr. pub.	729	802	1,866	1,256	1,639	778
4 yr. priv.	309	354	776	644	1,014	559
Other	339	333	615	340	196	93
Total	1,851	2,184	4,390	3,040	3,324	1,665

Table A.2.2.5.--Number of 1972 and 1980 high school seniors applying applying to each type of first choice postsecondary education institution, by ability level

Type	Ability level			
	High		Other	
	1972	1980	1972	1980
2 yr. pub.	143	93	1,318	1,447
4 yr. pub.	794	573	2,255	2,134
4 yr. priv.	530	455	926	1,007
Other	69	30	732	656
Total	1,536	1,151	5,231	5,244

Table A.2.3.1.--Numbers of 1972 and 1980 cohorts applying to each first choice/second choice postsecondary education institution types combination for those with two choices

1st/2nd choice types	1972	1980
2 yr.pub./Other	47	33
2 yr.pub./2 yr.pub.	178	94
2 yr.pub./4 yr.pub.	145	283
2 yr.pub./4 yr.priv.	53	46
2 yr. public total	423	456
4 yr.pub./Other	61	47
4 yr.pub./2 yr.pub.	210	180
4 yr.pub./4 yr.pub.	1,350	1,091
4 yr.pub./4 yr.priv.	479	286
4 yr. public total	2,100	1,604
4 yr.priv./Other	43	26
4 yr.priv./2 yr.pub.	70	74
4 yr.priv./4 yr.pub.	502	370
4 yr.priv./4 yr.priv.	659	650
4 yr. private total	1,274	1,120
Other/Other	127	134
Other/2 yr.pub.	50	41
Other/4 yr.pub.	50	53
Other/4 yr.priv.	32	25
Other total	259	253

Table A.2.4.1.--Numbers and standard deviations of mean SAT scores of first, second, and third choice postsecondary education institutions selected by 1972 and 1980 high school seniors

	1972		1980	
Choice	SD	N	SD	N
First	125.2	8,153	128.3	5,932
Second	125.8	3,496	135.0	2,631
Third	130.5	1,535	134.8	1,138

Table A.2.4.2.--Numbers and standard deviations of mean SAT scores of first choice postsecondary education institutions selected by 1972 and 1980 high school seniors, separately by each control variable

	1972		1980	
Variable	SD	N	SD	N
Sex				
Male	127.4	4,153	130.2	2,616
Female	122.3	3,997	126.2	3,316
Race/ethnicity				
Hispanic	106.1	293	111.7	1,028
Black	169.5	950	150.3	1,509
White	116.5	6,540	121.9	3,031
SES				
Low	129.3	1,463	115.2	1,687
Middle	111.7	3,661	112.2	2,498
High	126.0	3,020	130.2	1,484
Ability level				
High	125.7	1,419	128.6	1,043
Other	109.7	4,353	109.7	4,217

Table A.2.4.3.--Numbers and standard deviations of mean SAT scores of first choice postsecondary education institutions selected by 1972 and 1980 high school seniors, by institutional type

	1972		1980	
Type	SD	N	SD	N
2 yr. pub.	19.2	1,893	22.9	1,508
4 yr. pub.	99.1	4,179	102.5	2,825
4 yr. priv.	150.3	1,755	151.2	1,506
Other	68.5	262	46.9	93

Table A.2.4.4.--Numbers of 1972 and 1980 high school seniors whose first, second, and third choice postsecondary education institutions are in-state

Choice	1972	1980
First	8,532	6,655
Second	3,589	2,843
Third	1,568	1,202

Table A.2.4.5.--Numbers of 1972 and 1980 high school seniors whose first choice postsecondary education institutions are in-state, separately by each control variable

Variable	1972	1980
Sex		
Male	4,288	2,873
Female	4,241	3,782
Race/ethnicity		
Hispanic	310	1,152
Black	1,032	1,720
White	6,797	3,372
SES		
Low	1,610	1,966
Middle	3,847	2,817
High	3,066	1,569
Ability level		
High	1,437	1,083
Other	4,595	4,811

Table A.2.4.6.--Numbers of 1972 and 1980 high school seniors whose first choice postsecondary education institutions are in-state, by institutional type

Type	1972	1980
2 yr. pub.	1,969	1,674
4 yr. pub.	4,190	2,945
4 yr. priv.	1,768	1,559
Other	535	477

Table A.2.4.7.--Numbers and standard deviations of mean total cost at first, second, and third choice postsecondary education institutions selected by 1972 and 1980 high school seniors

	1972		1980	
Choice	SD	N	SD	N
First	1863.1	7,744	1765.3	6,938
Second	1925.5	3,322	1880.5	3,040
Third	2048.9	1,470	1960.3	1,931

Table A.2.4.8.--Numbers and standard deviations of mean total cost at first choice postsecondary education institutions selected by 1972 and 1980 high school seniors, separately by each control variable

Variable	1972 SD	1972 N	1980 SD	1980 N
Sex				
Male	1929.4	3,887	1806.5	3,012
Female	1789.9	3,854	1728.8	3,926
Race/ethnicity				
Hispanic	1706.0	262	1529.9	1,210
Black	1762.3	916	1477.3	1,853
White	1858.3	6,212	1812.4	3,469
SES				
Low	1654.8	1,418	1329.1	2,075
Middle	1654.8	3,454	1551.1	2,924
High	2062.0	2,865	2051.8	1,611
Ability level				
High	2139.4	1,348	2161.9	1,117
Other	1631.3	4,136	1451.7	5,017

Table A.2.4.9.--Numbers and standard deviations of mean total cost at first choice postsecondary education institutions selected by 1972 and 1980 high school seniors, by institutional type

	1972		1980	
Type	SD	N	SD	N
2 yr. pub.	903.9	1,702	421.9	1,692
4 yr. pub.	853.0	3,836	710.9	3,041
4 yr. priv.	1610.7	1,710	1607.3	1,655
Other	1541.2	436	753.5	550

Table A.2.4.10.--Numbers and standard deviations of mean enrollment of first, second, and third choice postsecondary education institutions selected by 1972 and 1980 high school seniors

	1972		1980	
Choice	SD	N	SD	N
First	10546.3	8,282	11416.0	6,679
Second	10877.6	3,530	11812.8	2,857
Third	10397.0	1,552	10766.7	1,207

Table.A.2.4.11.--Numbers and standard deviations of mean enrollment of first choice postsecondary education institutions selected by 1972 and 1980 high school seniors, separately by each control variable

	1972		1980	
Variable	SD	N	SD	N
Sex				
Male	10839.4	4,207	12111.6	2,548
Female	10205.6	4,072	10741.5	3,371
Race/ethnicity				
Hispanic	9906.5	300	11629.4	1,016
Black	9965.1	985	10956.0	1,494
White	10599.1	6,616	11419.0	3,043
SES				
Low	9521.6	1,512	10085.3	1,782
Middle	9784.7	3,721	10624.3	2,596
High	11593.5	3,040	12647.9	1,431
Ability level				
High	11908.3	1,426	12616.0	1,103
Other	10058.5	4,435	10450.4	4,816

Table A.2.4.12.--Numbers and standard deviations of mean enrollment of first choice postsecondary education institutions selected by 1972 and 1980 high school seniors, by institutional type

	1972		1980	
Type	SD	N	SD	N
2 yr. pub.	5139.2	1,953	6895.9	1,674
4 yr. pub.	11541.9	4,184	12837.8	2,973
4 yr. priv.	6695.3	1,768	7018.6	1,560
Other	1104.0	314	1353.3	470

Table A.2.5.1.--Numbers of 1972 and 1980 high school seniors noting that each of several factors is important in selecting a college

Factors	1972	1980
College expenses	4,767[1]	4,799
Avail. of aid	3,286	4,168
Avail. of curric.	5,232	5,249
Acad. reputat.	5,075	5,158
Athletic reputat.	1,809	2,551
Able live home	2,173	2,454

1. The values reported are the number of those rating a given factor as somewhat or very important.

Table A.2.5.2.--Numbers of 1972 and 1980 high school seniors noting that each of several factors is important in selecting a college, by type of first choice postsecondary education institution[1]

	Type					
	2 yr. public		4 yr. public		4 yr. private	
Factors	1972	1980	1972	1980	1972	1980
College expenses	231[2]	361	2,529	2,418	1,062	1,224
Available aid	151	312	1,660	2,043	844	1,121
Avail. curric.	243	381	2,671	2,558	1,293	1,488
Acad. reputation	222	370	2,623	2,541	1,271	1,456
Athlet. reputat.	83	185	942	1,300	431	711
Able live home	192	291	960	1,023	328	478

1. These items were not asked of those planning to attend other institutions.

2. The values reported are the number of those rating a given factor as important.

Table A.3.1.1.--Numbers of 1972 and 1980 high school seniors applying for financial aid at first, second, and third choice postsecondary education institutions

Choice	1972	1980
First	2,839	3,114
Second	987	894
Third	386	330

Table A.3.1.2.--Numbers of 1972 and 1980 high school seniors applying for financial aid at each type of first, second, and third choice postsecondary education institution

	Choice					
	First		Second		Third	
Type	1972	1980	1972	1980	1972	1980
2 yr. pub.	387	655	87	98	22	40
4 yr. pub.	1,281	1,353	440	417	156	147
4 yr. priv.	832	842	405	317	199	129
Other	273	264	48	61	7	14

Table A.3.1.3.--Numbers of 1972 and 1980 high school seniors applying for financial aid at their first choice postsecondary education institution, separately by each control variable

Variable	1972	1980
Sex		
Male	1,347	1,320
Female	1,493	1,797
Race/ethnicity		
Hispanic	159	633
Black	558	1,079
White	2,098	1,520
SES		
Low	810	1,166
Middle	1,350	1,407
High	730	578
Ability level		
High	593	572
Other	1,407	2,248

Table A.3.1.4.--Numbers of 1972 and 1980 high school seniors applying for financial aid at their first choice postsecondary education institution, by aptitude and SES

SES/aptitude category	1972	1980
Low SES		
Low aptitude	428	547
Middle aptitude	499	725
High aptitude	247	346
Middle SES		
Low aptitude	394	419
Middle aptitude	1,360	1,245
High aptitude	1,089	698
High SES		
Low aptitude	123	93
Middle aptitude	740	550
High aptitude	1,236	616

Table A.3.2.1.--Numbers of 1972 and 1980 high school seniors offered aid among those who applied for aid at first, second, and third choice postsecondary education institutions

Choice	1972	1980
First	2,147	2,716
Second	667	748
Third	230	290

Table A.3.2.2.--Numbers of 1972 and 1980 high school seniors offered aid among those who applied for aid at each type of first, second, and third choice postsecondary education institutions

	Choice					
	First		Second		Third	
Type	1972	1980	1972	1980	1972	1980
2 yr. pub.	313	600	62	101	16	35
4 yr. pub.	899	1,162	269	342	87	118
4 yr. priv.	633	725	297	257	121	124
Other	252	229	37	50	7	12

Table A.3.2.3.--Numbers of 1972 and 1980 high school seniors offered aid among those who applied for aid at their first choice postsecondary education institution, separately by each control variable

Variable	1972	1980
Sex		
Male	961	1,122
Female	1,186	1,596
Race/ethnicity		
Hispanic	129	579
Black	424	892
White	1,509	1,198
SES		
Low	709	1,115
Middle	1,016	1,183
High	441	404
Ability level		
High	402	453
Other	1,107	1,985

Table A.3.3.1.--Numbers of 1972 and 1980 high school seniors offered a grant, a loan, and/or work-study aid among those who were offered aid at first and second choice postsecondary education institutions

	Choice			
	First		Second	
Aid type	1972	1980	1972	1980
Grant	1,421	1,907	540	625
Loan	1,316	1,738	344	484
Work-study	662	941	208	327

Table A.3.3.2.--Numbers of 1972 and 1980 high school seniors offered a grant, a loan, and/or work-study aid among those who were offered aid at each type of first choice postsecondary education institution

	Type aid					
	Grant		Loan		Work-study	
Type	1972	1980	1972	1980	1972	1980
2 yr. pub.	197	417	145	308	109	193
4 yr. pub.	587	789	582	752	267	390
4 yr. priv.	507	567	380	489	224	294
Other	105	125	173	182	51	57

Table A.3.3.3.--Numbers of 1972 and 1980 high school seniors offered a grant, a loan, and/or work-study aid among those who were offered aid at their first choice postsecondary education institution, separately by each control variable

	Type aid					
	Grant		Loan		Work-study	
Variable	1972	1980	1972	1980	1972	1980
Sex						
Male	664	765	596	730	257	353
Female	755	1,144	721	1,005	407	589
Race/ethnicity						
Hispanic	68	437	79	345	41	221
Black	241	606	309	523	148	373
White	1,024	801	893	757	438	375
SES						
Low	399	783	470	610	243	426
Middle	673	797	634	740	316	389
High	329	264	225	275	111	128
Ability level						
High	330	373	230	279	118	172
Other	652	1,312	115	1,291	354	671

Table A.3.4.1.--Numbers for calculating the mean proportions of grants, loans, and work-study aid offered relative to total aid received at first and second choice postsecondary education institutions

	Choice			
	First		Second	
Aid type	1972	1980	1972	1980
Grant	985	1,210	393	384
Loan	875	1,156	197	280
Work-study	300	347	83	100

Table A.3.4.2.--Numbers for calculating the mean proportions of grants, loans, and work-study aid offered relative to total aid received at first choice postsecondary education institutions

	Type aid					
	Grant		Loan		Work-study	
Type	1972	1980	1972	1980	1972	1980
2 yr. pub.	142	277	105	207	62	81
4 yr. pub.	407	511	397	527	128	159
4 yr. priv.	348	346	199	278	82	88
Other	74	73	147	147	25	2

Table A.3.4.3.--Numbers for calculating the mean proportions of grants, loans, and work-study aid offered relative to total aid received at first choice postsecondary education institutions, separately by each control variable

	Type aid					
	Grant		Loan		Work-study	
Variable	1972	1980	1972	1980	1972	1980
Sex						
Male	474	501	393	497	106	130
Female	508	711	481	657	194	219
Race/ethnicity						
Hispanic	49	274	58	214	18	81
Black	156	368	207	326	65	143
White	718	519	594	521	200	139
SES						
Low	262	511	321	380	114	165
Middle	458	493	426	498	146	156
High	246	168	138	193	45	38
Ability level						
High	232	242	127	164	47	65
Other	442	809	504	885	168	260

Table A.3.5.1.--Numbers for calculating the mean proportions of grants, loans, and work-study aid offered relative to total costs at first and second choice postsecondary education institutions

	Choice			
	First		Second	
Aid type	1972	1980	1972	1980
Grant	479	661	197	197
Loan	478	783	122	187
Work-study	196	280	57	73

Table A.3.5.2.--Numbers for calculating the mean proportions of grants, loans, and work-study aid offered relative to total costs of each type of first choice postsecondary education institution

	Type aid					
	Grant		Loan		Work-study	
Type	1972	1980	1972	1980	1972	1980
2 yr. pub.	90	150	79	183	57	80
4 yr. pub.	221	335	261	394	97	140
4 yr. priv.	155	153	102	135	36	52
Other	16	28	41	74	11	11

Table A.3.5.3.-- Numbers for calculating mean proportions of grants, loans, and work-study aid offered relative to total costs at their first choice postsecondary education institution, separately by each control variable

	Type aid					
	Grant		Loan		Work-study	
Variable	1972	1980	1972	1980	1972	1980
Sex						
Male	236	274	212	338	69	110
Female	243	386	266	445	128	170
Race/ethnicity						
Hispanic	36	161	34	153	13	70
Black	106	232	119	229	49	109
White	319	263	312	363	122	106
SES						
Low	152	289	154	269	79	133
Middle	234	265	228	343	100	116
High	99	94	72	129	22	26
Ability level						
High	100	126	72	117	26	41
Other	239	462	284	594	118	214

Table A.3.6.1.--Numbers for calculating mean proportions of total aid offered relative to total costs at first and second choice postsecondary education institutions, overall and by institutional type

	Choice			
	First		Second	
	1972	1980	1972	1980
Overall	1,146	1,698	380	464
2 yr. pub.	221	418	54	70
4 yr. pub.	573	850	164	226
4 yr. priv.	291	333	144	130
Other	75	111	16	34

Table A.3.6.2.--Numbers for calculating mean proportions of total aid offered relative to total costs at first choice postsecondary education institutions, separately by each control variable

Variable	1972	1980
Sex		
Male	521	704
Female	625	992
Race/ethnicity		
Hispanic	80	395
Black	271	564
White	754	719
SES		
Low	411	676
Middle	556	726
High	195	247
Ability level		
High	199	282
Other	629	1,250

Table A.4.1.1.--Numbers of 1972 and 1980 high school seniors attending their first choice postsecondary education institution, overall and for each institutional type

	1972	1980
Overall	6,385	4,720
2 yr. pub.	1,494	1,292
4 yr. pub.	2,847	1,998
4 yr. priv.	1,180	1,012
Other	747	425

Table A.4.1.2.--Numbers of 1972 and 1980 high school seniors attending their first choice postsecondary education institution, separately by each control variable

Variable	1972	1980
Sex		
Male	3,175	2,054
Female	3,207	2,666
Race/ethnicity		
Hispanic	219	781
Black	618	1,015
White	5,229	2,496
SES		
Low	1,110	1,316
Middle	2,940	2,025
High	2,290	1,171
Ability level		
High	1,071	799
Other	3,399	3,475

Table A.4.1.3.--Numbers of 1972 and 1980 high school seniors attending their first choice postsecondary education institution, by aptitude and SES

SES/aptitude category	1972	1980
Low SES		
Low aptitude	486	594
Middle aptitude	562	766
High aptitude	256	370
Middle SES		
Low aptitude	451	462
Middle aptitude	1,498	1,327
High aptitude	1,150	743
High SES		
Low aptitude	140	98
Middle aptitude	830	593
High aptitude	1,381	706

Table A.4.2.1.--Numbers of 1972 and 1980 high school seniors attending their first choice postsecondary education institution for those applying to only one institution or more than one institution

# applications	1972	1980
One	4,487	3,254
Two or more	1,908	1,477

Table A.4.2.2.--Numbers of 1972 and 1980 high school seniors attending their first choice postsecondary education institution for those applying to only one institution or more than one institution, by type of first choice institution

	# applications			
	One		Two or more	
Type	1972	1980	1972	1980
2 yr. pub.	1,302	1,103	189	189
4 yr. pub.	1,842	1,291	1,007	721
4 yr. priv.	592	523	591	489
Other	630	341	120	79

Table A.4.2.3.--Numbers of 1972 and 1980 high school seniors attending their first choice postsecondary education institution for those applying to only one institution or more than one institution, separately by each control variable

	# applications			
	One		Two or more	
Variable	1972	1980	1972	1980
Sex				
Male	2,232	1,431	950	632
Female	2,252	1,822	957	845
Race/ethnicity				
Hispanic	160	572	58	215
Black	429	691	192	329
White	3,683	1,709	1,560	788
SES				
Low	838	946	274	353
Middle	2,184	1,423	765	588
High	1,429	683	856	486
Ability level				
High	625	470	450	336
Other	2,493	2,415	903	1,038

Table A.4.3.1.--Numbers of 1972 and 1980 high school seniors offered financial aid for those attending their first, second, and third choice postsecondary education institution

Choice	1972	1980
First	1,575	1,988
Second	367	407
Third	93	115

Table A.4.3.2.--Numbers of 1972 and 1980 high school seniors offered financial aid for those attending their first choice postsecondary education institution, by institutional type

Type	1972	1980
2 yr.pub.	229	443
4 yr. pub.	682	839
4 yr. priv.	458	536
Other	194	162

Table A.4.3.3.--Numbers of 1972 and 1980 high school seniors offered financial aid for those attending their first choice postsecondary education institution, separately by each control variable

Variable	1972	1980
Sex		
Male	714	824
Female	861	1,138
Race/ethnicity		
Hispanic	96	411
Black	311	731
White	1,170	984
SES		
Low	485	851
Middle	781	906
High	353	343
Ability level		
High	314	366
Other	769	1,437

Table A.4.4.1.--Numbers of 1972 and 1980 high school seniors who attended an institution at which they were offered aid, overall and separately by each control variable

Variable	1972	1980
Overall	2,197	3,039
Sex		
Male	1,011	1,275
Female	1,184	1,762
Race/ethnicity		
Hispanic	112	604
Black	439	983
White	1,537	1,277
SES		
Low	657	1,147
Middle	1,055	1,281
High	472	467
Ability level		
High	419	525
Other	1,104	2,177

Table A.4.5.1.--Numbers of 1972 and 1980 high school seniors who did not attend their first choice postsecondary education institution but who attended each type of their second or third choice postsecondary education institution, by first choice type

	First choice type							
	2 yr.pub.		4 yr.pub.		4 yr.priv.		Other	
Type attended	1972	1980	1972	1980	1972	1980	1972	1980
2 yr. pub.	19	12	74	27	157	136	45	41
4 yr. pub.	7	6	17	9	390	263	205	151
4 yr. priv.	6	6	8	14	160	68	229	209
Other	44	18	17	9	38	41	19	17

Table A.4.5.2.--Numbers used in the calculation of the difference between first choice institutional mean SAT score and mean SAT score of institution attended for 1972 and 1980 seniors not attending their first choice institution

	1972		1980	
Variable	SD	N	SD	N
Overall	122.9	803	129.7	557
Sex				
Male	125.4	402	133.5	229
Female	120.2	401	126.4	328
Race/ethnicity				
Hispanic	86.0	22	117.8	77
Black	197.5	105	161.3	185
White	110.9	634	121.8	264
SES				
Low	134.7	123	149.1	145
Middle	124.8	342	131.4	237
High	117.3	338	118.1	149
Ability level				
High	127.3	183	144.4	117
Other	126.5	404	124.6	379

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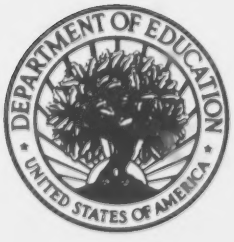
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